

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on November 12, 2009

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman
Patricia L. Acampora
Maureen F. Harris
Robert E. Curry, Jr.
James L. Larocca

CASE 08-T-1245 - Application of Bayonne Energy Center, LLC for a Certificate of Environmental Compatibility and Public Need for the Construction of the New York State Portion (Kings County) of a 6.6 Mile, 345 kV AC, 3 Phase Circuit Submarine Electric Transmission Facility Pursuant to Article VII of the PSL.

ORDER ADOPTING THE TERMS OF A JOINT PROPOSAL
AND GRANTING CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED, WITH CONDITIONS, AND CLEAN
WATER ACT §401 WATER QUALITY CERTIFICATION

(Issued and Effective November 12, 2009)

BY THE COMMISSION:

INTRODUCTION

On October 17, 2008, Bayonne Energy Center, LLC (BEC, Applicant) filed its application for a certificate of environmental compatibility and public need for an electric transmission facility, pursuant to Public Service Law (PSL) Article VII (the Application).¹ The Applicant proposes the construction, operation and maintenance of the New York State portion of the Bayonne Energy Center Project (Project), a 345 kilovolt (kV) alternating current (AC) submarine electric cable system, associated upland cable, and interconnection equipment (collectively, the Facility). On October 5, 2009,

¹ The Application refers to the documents filed on October 17, 2008 and the subsequent supplemental filings submitted December 5, 2008 and January 21, 2009 deemed in compliance with PSL §122 as of January 21, 2009 by letter of the Secretary to the Commission (Secretary) dated January 29, 2009.

BEC, Department of Public Service Staff (Staff), New York State Department of Environmental Conservation (DEC), New York City Economic Development Corporation (NYCEDC) and the City of New York (NYC) executed and filed a Joint Proposal, with proposed Certificate Conditions (Appendix A), a proposed Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations (Joint Proposal, Appendix A, Attachment 1) and Proposed §401 Water Quality Certification (Appendix B). There is no record opposition to the Joint Proposal.

THE BEC FACILITY

The Application concerns the New York State portion of a larger undertaking, also encompassing a generation plant in New Jersey. Bayonne Energy Center proposed to construct and operate the Bayonne Energy Center Project, with a new 512 megawatt (MW) multi-unit, simple-cycle natural gas-fired (with ultra low sulfur diesel oil as backup fuel) electric generating plant to be located in Bayonne, New Jersey, and a new 345 kV AC submarine electric transmission cable routed from Bayonne to Brooklyn, New York. The submarine electric cable will extend approximately 2.5 miles under New York waters, and will provide a dedicated connection between a new 512 MW simple-cycle natural gas-fired generating facility in Bayonne, New Jersey and the Consolidated Edison Corporation of New York, Inc. (Con Edison) substation in Brooklyn. The jurisdictional portion of the Project is the construction, operation and maintenance of the Submarine and Upland Transmission Cable System between the New York-New Jersey state line in Upper New York Bay and the point of interconnection (the Electrical Interconnection) with the Con Edison system.

The route of the transmission cable system is detailed in the Joint Proposal. Generally, it begins in New Jersey on the south side of the Bayonne Energy Center, and continues in that state's waters for approximately 3.9 miles. The Submarine Transmission Cable will enter the Kill Van Kull at the BEC generating facility, running perpendicular to the shore before turning northeast to run generally parallel to shore, before turning easterly to where it enters New York waters within the Anchorage Channel. The route crosses Red Hook Channel, continuing south to enter the Gowanus

Bay Federal Channel. It will run east past the Astoria Generating Gowanus Station, and turn southeast towards the landfall, at a point northwest of the abutting pier containing the Lafarge Cement Brooklyn Terminal (the 25th Street Pier). The New York landfall is located at an undeveloped, private parcel of land. The landfall will consist of transition vaults to connect the Submarine Transmission Cable to the route of the Upland Transmission Cable Route, and the electrical interconnection to the Gowanus Substation. The cables will make landfall via conduits installed within three horizontal directional drilling (HDD) boreholes. The cable system will transition to an aboveground connection of the cable to new terminal equipment at the Gowanus Substation. The equipment includes a new terminal ring bus, to make the BEC Project's final connection to Con Edison's 345 kV electrical systems. Of the upland transmission cable, approximately 20-25 feet will be above ground.

As detailed in the Joint Proposal, seasonal schedules and specifications governing the construction process have been crafted to minimize the environmental impacts of the drilling and other building processes, including the use of jet plows. These specifications include water quality impacts, effects of construction on marine resources, and numerous other methods to protect against environmental injury during the construction and operation of the Facility. These specifications are contained in the Certificate Conditions and Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations (Water Monitoring Plan) appended to the Certificate Conditions.

The New Jersey generation plant and the Facility are expected to commence construction once all applicable permits have been received, and to be able to deliver power into New York City in the fourth quarter of 2011. The Bayonne Energy Center is a merchant project; its revenues will derive from wholesale power transactions.² It has long-term agreements for the purchase of 50% of its output. The components of the Facility will connect a new, 512 MW multi-unit, simple-cycle natural gas-fired dedicated generating plant in Bayonne, New Jersey to Con Edison's system in Brooklyn.

² Applicant is a Delaware limited liability joint venture between an affiliate of ArcLight Capital Partners, LLC, and Hess Corporation.

The generating facility in Bayonne will also use ultra low sulfur diesel oil as a backup fuel. With this connection in place, the BEC project will interconnect with the New York Independent System Operator (NYISO) electrical grid at Con Edison's Gowanus substation. The record analysis demonstrates that adding the 512 MW to the New York City supply will create savings by exercising a downward effect on localized marginal prices.

The BEC will be a mid-merit or intermediate generation facility. It could be dispatched after baseload, and operated as a mid-range generation or peaking unit depending upon the bids submitted to the NYISO. In addition to providing capacity and energy benefits, the BEC project will provide ancillary services such as black-start capability, an important feature in the event of a blackout or other major electric system disturbance. It will also provide valuable quick-start operating reserves because the facility can be counted as a part of the NYISO quick-start 10-minute reserve and will meet emissions standards. The Facility will also mitigate, in part, existing transmission constraints of concern to New York City by providing an additional source into the city.

On October 5, 2009, parties filed a Joint Proposal. Signatories to the Joint Proposal are BEC, Department of Public Service Staff, New York State Department of Environmental Conservation, the City of New York, and the New York City Economic Development Corporation (collectively, the Signatory Parties).³ Attached to the Joint Proposal as Appendix A are Certificate Conditions to which the Signatory Parties also agree, and Attachment 1 to the Certificate Conditions, the Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operation (Water Monitoring Plan). Also attached is Appendix B, the Proposed §401 Water Quality Certification. The proposed Certificate Conditions, Water Monitoring Plan, and Water Quality Certification provide safeguards that resolve issues disputed among parties during the Application review process, and minimize the potential harm to the environment from construction and operation of the Facility.

³ BEC filed original signature pages with the Secretary on October 16, 2009.

THE PROCEDURAL HISTORY

Bayonne Energy Center filed an application with the Commission on October 17, 2008, seeking a Certificate of Environmental Compatibility and Public Need for the construction of the New York State portion (Kings County) of a 6.6 mile, 345 kV AC, 3-phase circuit submarine electric transmission facility pursuant to Article VII of the Public Service Law. The initial application proposed construction, operation and maintenance of the New York portion of the BEC project.⁴

Deficiencies in the BEC Application were noted by the Secretary on November 21, 2008, and BEC filed supplemental information on December 5, 2008. By letter dated January 13, 2009, the Secretary again informed BEC that deficiencies remained. Although some deficiencies had been adequately addressed in its December 5, 2008 filing, additional information was necessary before the application would be deemed complete pursuant to PSL §122. On January 21, 2009, BEC submitted additional information. The Secretary notified BEC by letter dated January 29, 2009, that the October 17, 2008 application, supplemented by filings on December 5, 2008 and January 21, 2009, was deemed filed and otherwise in compliance, as of January 21, 2009, with Public Service Law §122 and the implementing regulations of 16 NYCRR Parts 85, 86, and 88.

Pursuant to a Notice issued March 9, 2009, a public statement hearing to solicit public concerns, if any, was held on March 24, 2009, at the Commission's New York City offices. The public statement hearing was held before the Administrative Law Judge and Commissioner Patricia L. Acampora. No members of the public attended or

⁴ BEC states that its representatives met, prior to the filing of the application, with stakeholders or concerned parties to discuss its proposed project, including not only Staff and NYSDEC, but also the Division of Coastal Resources of the New York State Department of State, the borough presidents of Brooklyn and Staten Island, Con Edison, the Empire State Development Corporation, NYCEDC, the NYISO, the Port Authority of New York and New Jersey, the National Marine Fisheries Service, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the United States Coast Guard, and the Harbor Safety, Operations, and Navigation Committee of New York and New Jersey. BEC Statement in Support, p. 2.

provided statements or comments on the Application. A Procedural Conference was held the same day, attended by representatives of BEC, Staff, DEC, and Con Edison.

Comments were submitted by DEC on February 6, 2009 and a letter from DEC was submitted June 25, 2009, requesting corrections to the monitoring plan and expressing concerns regarding the environmental impact of some aspects of the proposed facility. Staff requested that BEC provide a dispatch and environmental analysis of its proposed project and on September 18, 2009 BEC filed the Dispatch and Environmental Analysis of the Bayonne Energy Center, and Factor Inputs, Bayonne Energy Center Project, produced by Levitan & Associates, Inc. (the LAI Dispatch Analysis).

Following the exchange of discovery requests and responses, exploratory discussions were held among the parties to consider whether settlement of some or all of the issues concerning the Application was feasible. On June 5, 2009, a Notice of Impending Negotiations pursuant to 16 NYCRR 3.9(a)(1) was filed with the Secretary and served on all active parties. Settlement conferences were held on June 19 and July 14, 2009. Bayonne Energy Center, Staff, DEC, and Con Edison attended one or both in-person settlement conferences, and subsequent settlement discussions via teleconference and electronic exchanges also included the New York City parties. At the request of the parties, several postponements of the proceeding schedule accommodated the negotiation process.⁵

⁵ A ruling establishing the schedule was issued April 9, 2009. Further rulings were issued on July 3, 2009, August 25, 2009, and October 2, 2009, revising the proceeding schedule.

On October 5, 2009, BEC, Staff, DEC, NYCEDC, and NYC executed and filed the Joint Proposal, with proposed Certificate Conditions and a proposed Water Quality Certification.⁶ On that day BEC and Staff also filed their Statements in Support of the Joint Proposal. New York City filed its Statement of Support on October 13, 2009. On October 9, 2009, an on-the-record evidentiary hearing was held for the purposes of examination of the terms of the Joint Proposal and compilation of the complete record in this proceeding.⁷ At the hearing BEC provided a Statement of Counsel in Support of Submission of Evidence into the Record, identifying and providing qualifications of witnesses providing pre-filed testimony supporting the Application, and affirming that those witnesses adopted and sponsored their pre-filed testimony for inclusion in the record of this proceeding.

The evidentiary record in this proceeding consists of the Application, testimony and exhibits of BEC (filed), as well as BEC's responses to DPS Staff's interrogatories. The contents of the evidentiary record up to October 5, 2009, are

⁶ Bayonne Energy Center received the following New Jersey approvals for the construction of the generation and New Jersey portion of the transmission facility: City of Bayonne Division of Planning & Zoning resolution memorializing the Planning Board's decision approving, with conditions, the Preliminary and Final Major Site Plan and variances to construct an electrical power production and transmission facility; and a New Jersey Department of Environmental Protection Air Pollution Control Operating Permit (September 24, 2009). The Army Corps of Engineers has not acted on the BEC permit application.

⁷ Bayonne Energy Center, Staff, DEC, NYC and NYCEDC made appearances at the Evidentiary Hearing; a stenographic transcript of 59 pages was compiled.

recorded in the Joint Proposal.⁸ In addition, in the record are the Joint Proposal, the LAI report, and the Transcript of the evidentiary hearing held October 9, 2009.⁹

THE JOINT PROPOSAL

Two principal substantive terms of the Joint Proposal are summarized here, but the full text of the Joint Proposal, attached to this Order as Appendix A, should be consulted as to the exact terms of that agreement.

Basis of Need

The Joint Proposal describes the basis on this record for a finding of need pursuant to PSL §§126(1)(a), relying on several factors. First, the agreement asserts that the addition of new generation facilities at a rate greater than the rate of growth of electric demand is necessary to displace or retire generation from older, less efficient generation facilities dispatched on High Energy Demand Days. Those less efficient facilities, according to the Joint Proposal, provide power at high cost while emitting more air pollution than newer, more efficient facilities with state-of-the-art emission controls.¹⁰

Second, the Joint Proposal references the NYISO Comprehensive System Planning Process concerning the need to ensure continued reliability of the electric grid. The Joint Proposal asserts that both the NYISO January 13, 2009 Reliability Needs Assessment, and the NYISO May 19, 2009 Comprehensive Reliability Plan encourage competitive markets for wholesale and retail supply, such as BEC intends to provide. Bayonne Energy Center also references the New York City Economic Development Corporation's Master Electrical Transmission Plan for New York City, dated May 28, 2009 (NYC Transmission Plan). These public Plans and Reports are incorporated by

⁸ Joint Proposal, pp. 3-5.

⁹ By letter to Active Parties dated November 9, 2009, the administrative law judge reopened this record to invite parties to elaborate on the language in paragraph 17 of the Joint Proposal, concerning the impact of projected reliability upgrades for the Gowanus substation on the accommodation of future projects. BEC and Con Edison both responded to the effect that the planned modifications will create more physical interconnection positions; however, a determination of whether additional capacity was available would depend upon the specific designs and requirements of future projects.

¹⁰ Joint Proposal, p. 7.

reference pursuant to 16 NYCRR 85-2.7.

Third, the Joint Proposal discusses the basis of the need for the Facility, expected to deliver power in the fourth quarter of 2011, in the event that any of a number of contingencies occurs: other planned projects are not accomplished; generator retirements result from relicensing disapproval; generator retirements resulting from planned emissions control requirements in the event of federal Clean Air Act National Ambient Air Quality Standards or climate change programs or legislation; reduced availability of demand response or energy efficiency reductions; or other risk factors that could affect future system reliability.¹¹

The Environmental Impact

Two areas of concern with respect to environmental impacts of the Application were considered: those associated with construction and operation of the Facility, and those stemming from the addition of the Facility to the electric generation resources of the New York City and State electric power system. First, the environmental consequences of the construction of the Facility, in particular the effects on marine resources and water quality, were of special concern to DEC. The Joint Proposal, to which DEC is a signatory, contains the results of negotiations on these issues, and includes Certificate Conditions detailing the schedule, methods and reporting associated with the submarine construction and mitigation plans. The Applicant will be obligated to file an environmental management and construction plan (EM & CP) consistent with the Certificate Conditions. Attached to the Certificate Conditions is a Water Quality Monitoring Plan, to ensure protection of water quality throughout and following the construction.

The second set of environmental impacts concerns the consequences for emissions resulting from the addition of the Project to New York's electricity resources. The Joint Proposal envisions considerable environmental benefits accruing from the operation of the BEC Project and Facility, anticipating that BEC will reduce system reliance on older, more highly emitting fossil fuel resources. In addition, it will add more efficient generation to the State's mix of resources. The LAI Dispatch Analysis

¹¹ Joint Proposal, pp. 7-8.

concludes that the Project's operation would result in a decline from the present amount in annual NO_x emissions in New York City by 12% (349 tons); in SO₂ emissions by 25% (104 tons), and of CO₂ emissions by 5% (407,000 tons).

THE PARTIES' STATEMENTS IN SUPPORT

Three parties filed statements in support of the BEC Application. No statements in opposition were filed, nor was any other opposition evinced in the course of the proceeding. The parties filing statements in support were BEC, Staff, and NYCEDC. All agree that the Joint Proposal complies with the pertinent sections of the Commission's guidelines and procedures for settlement,¹² and that the Joint Proposal is in the public interest. As to the process, all parties agree that the Joint Proposal represents agreement among normally adversarial parties, reflects a balance among protection of ratepayers and fairness to investors, and consists of results within the range of reasonableness that would likely have arisen from a Commission decision following a litigated proceeding. In addition, these parties agree that the terms of the Joint Proposal are consistent with sound environmental, social, and economic policies of the Commission and the State.

The BEC Statement in Support

Bayonne Energy Center stresses that the Joint Proposal is in the public interest because the Facility will ensure continued reliability and delivery of power to the New York City market; will promote competition and technological advancement in the provision of power to ratepayers; and will improve air quality in New York City and the surrounding area. In addition, BEC avers, the Joint Proposal includes sound environmental protection provisions.

As to the basis of need for the Facility, BEC asserts that the BEC Project will be a source of dedicated power generally responsive to immediate mid-merit (daily, diurnal cycling) demand for electricity in the New York City area and available for

¹² Opinion 92-2, Cases 90-M-0255, *et al.*, Opinion, Order and Resolution Adopting Settlement Procedures and Guidelines (March 24, 1992).

dispatch before pure peaking units. As stated in the Joint Proposal, mid-merit facilities operate at capacity factors falling between base load generators and peaking generators.¹³ It will also provide NYISO Zone J with new, directly linked and dedicated black-start generation capacity, which BEC asserts will assist the system recover quickly from major power outages.

Bayonne Energy Center also sees emissions benefits for New York, with new gas-fired generators emitting less air pollution per megawatt-hour, called into service before less-efficient, higher-emitting gas-fired generation. Further, because the Facility will serve as a dedicated transmission line, from the dedicated generator connected directly to the Gowanus substation, the BEC Project is considered in-City generation, and will contribute to the City meeting its in-City generation requirement. The Applicant demonstrated that the addition of the Facility is consistent with the U.S. Department of Energy designation of the New York City/New Jersey area as within the Mid-Atlantic Area National Interest Electric Transmission Corridor, as it will add new supply without adding power demands on existing transmission resources.

The Staff Statement in Support

Staff is generally in agreement with the Applicant, stressing that the Facility will make possible environmental benefits, including improved air quality in New York City and surrounding areas, resulting from the displacement of older, less efficient, and more polluting generation sources. Staff sees benefits to the competitive market, and to ratepayers, as a result of the shift of financial expenditure and risk from utilities to a merchant developer. Staff is confident that the terms of the Joint Proposal, and the Certificate Conditions and Water Quality Monitoring Plan are sound provisions for the protection of public health, safety and the environment.

The New York City Economic Development Corporation Statement in Support

The New York City Economic Development Corporation serves as principal energy policy advisor to the NYC Mayor's Office. NYCEDC fully supports the

¹³ The Joint Proposal states that the BEC Project will respond to "mid-merit (daily, diurnal cycling) demand for electricity in the New York City area" and provide timely support against reliability risk factors (Joint Proposal, p. 9, ¶20).

Joint Proposal, and both it and the City of New York are signatories to the Joint Proposal. In NYCEDC's view, significant benefits to the City and its electric ratepayers will result from the approval of the Facility.

NYCEDC argues that an Article VII finding of need should include critical considerations such as environmental and economic benefits of proposed projects. In NYCEDC's view, the BEC project, as a newly designed and built natural gas facility, will provide benefits including an increase in generation efficiency resulting from its low heat rate, and a reduction in expected air pollutant and carbon emissions. NYCEDC expects that BEC will be able to bid competitively in the NYISO wholesale energy market, across a wide range of hours, and will operate to displace less efficient generation units, leading to lower energy prices and reduced emissions. New York City Economic Development Corporation notes that, notwithstanding forecasts of a relative surplus of generation resources, additional considerations establish a need that can be met by BEC.¹⁴ In particular, the persistent New York City load pocket will be eased by the operation of the BEC facility, which the City deems to be in-City generation, "electrically located in New York City"¹⁵ because it is a dedicated plant. NYCEDC asserts that BEC will contribute to the NYISO 80% in-City generation resource requirement. NYCEDC points out reliability benefits of the BEC project, including Applicant's substantial investment in upgrades and improvements to Con Edison's Gowanus Substation.¹⁶

DISCUSSION AND CONCLUSION

The most recent NYISO Reliability Needs Assessment shows that there is no reliability need for additional electric generation facilities through 2019, using the

¹⁴ NYCEDC notes that the New York Power Authority's 875 MW Poletti Plant is scheduled for retirement in January 2010, and that the current slowing of load growth may not persist.

¹⁵ NYCEDC Statement in Support, p. 3.

¹⁶ Under the terms of the Joint Proposal, BEC will, within five (5) business days of the date of commercial operation of the Transmission Facility, contribute to the Economic Development Corporation of the City of New York \$1,500,000, to pay for energy-related economic development projects in support of PlaNYC. NYCEDC will identify the projects that will be eligible to use the funds and administer them.

base case assumptions. However, the BEC project meets the Public Service Law Article VII standard of need based on a number of factors. These factors include system reliability benefits, economic benefits for customers and New York State, and achievement of public policy goals including environmental benefits.

With respect to reliability, the BEC project will provide an additional source of supply in the event that other expected generation and transmission projects are not completed as projected, generation retires or is unavailable as a result of relicensing disapproval, emissions control requirements such as compliance with the Clean Air Act National Ambient Air Quality Standards or the effects of possible changes in state and federal climate change/greenhouse gas emission regulation and legislation, or for any other reason. The BEC project will provide significant capacity and energy benefits. Although the BEC generating facility is located in New Jersey, it is electrically interconnected directly with Con Edison's system at its Gowanus Substation in Brooklyn. Therefore, the NYISO will consider the BEC project to be in-city generation and it will be counted toward the New York City 80% Locational Capacity Requirement.

BEC will provide economic benefits for New York City consumers as a result of the addition of in-city generation. The facility is expected to displace older, less efficient generation, leading to reduced energy prices. If the resource is counted in the installed capacity market, there could be capacity price benefits as well. The addition of the BEC facility promotes competitive wholesale markets and helps reduce the market power of incumbent generators.

The BEC facility is a merchant project. No ratepayer funding is being sought. Therefore, any and all favorable impacts - reliability, economic or environmental - benefit New York without imposing additional risk on electric ratepayers.

From an environmental perspective, the addition of the BEC Project will provide the option of meeting the City's electricity needs with a cleaner generation mix than presently available. Adding new generation at a rate greater than the rate of electric demand growth will likely result in the displacement of older, inefficient generation, especially on High Energy Demand Days. The draft State Energy Plan emphasizes in-state generation, but also generally supports improving the efficiency of generation and

reducing emissions through new, cleaner technologies, without restricting that goal to generation located in New York State. BEC's operation should result in a decline from the present annual NO_x emissions in New York City by 12% (349 tons); SO₂ emissions by 25% (104 tons), and CO₂ emissions by 5% (407,000 tons).

The opportunity to improve the environmental properties and reduce emissions of the electricity used in New York is itself a basis of need, and the construction of the Facility meets these criteria. The addition of this facility is consistent with the State Energy Plan, New York City's PlaNYC and the NYCEDC Master Electrical Transmission Plan and will provide substantial reliability, economic and environmental benefits to New York City and State consumers.

The project provides significant potential benefits, and the potential negative environmental impacts are transitory and can be reasonably mitigated by compliance with the proposed Certificate Conditions and Water Quality Monitoring Plan.

We conclude that there is a basis of need for the Facility to provide additional in-City generation, to reduce transmission constraints for New York City, to reduce prices, and to contribute to ensuring system reliability in the event of a range of possible regulatory and legal changes or events that may transpire to reduce available generation. Further, the opportunity to improve the environmental properties and reduce the emissions of the electricity used in New York contributes to a basis of need, and the construction of the Facility meets these criteria.¹⁷ Finally, the environmental impacts of construction are transitory, and are outweighed by the economic, reliability, and emissions benefits of the Facility.

The provisions of the Joint Proposal are unopposed and they address all essential matters that must be considered in this proceeding. Also, the Joint Proposal has the support of the respective staffs of the Departments of Public Service and Environmental Conservation, as well as the City of New York, weighing in the balance in favor of our adoption, in the absence of any opposition to the Joint Proposal's terms and provisions. The Joint Proposal was developed using appropriate procedures, all active

¹⁷ See, CNG Transmission Corp. v. New York State Pub. Serv. Comm'n, 185 A.D. 2d 671 (3rd Dept 1992).

parties were informed of the commencement of settlement negotiations and their progress, and the public had ample opportunity to consider the Application and to present its views.

The Joint Proposal contains the terms and conditions necessary and appropriate to resolve all the issues relevant to this proceeding and required for the issuance of a Certificate of Environmental Compatibility and Public Need for Bayonne Energy Center to construct and operate the New York portion of an electric transmission facility pursuant to Article VII of the Public Service Law.

FINDINGS

Pursuant to Public Service Law Article VII, the Commission finds and determines that the facility meets the requirements for a certificate for the construction and operation of a major transmission facility. We find and determine, under PSL §126(1), that the facility is consistent with: (a) the basis of the need for the facility; (b) the nature of the probable environmental impact; (c) that the facility represents the minimum adverse environmental impact;¹⁸ (d)(1) what part of the line shall be located underground and (2) that such facility conforms to long-range plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, which will serve the interests of electric system economy and reliability; (f) that the location of the facility conforms to applicable state and local laws; and (g) that the facility will serve the public interest, convenience and necessity.

¹⁸ This finding takes into account the technology available, the viability of alternatives, and other factors including the effect on agricultural lands, wetlands, parklands and river corridors and the other factors contained in 16 NYCRR 86.5 (*See* N.Y. Pub. Serv. Law § 126(1)(c)).

Pursuant to PSL §126(1) the following constitute the specific findings and determinations of the Commission with respect to the Application of BEC for a certificate of environmental compatibility and public need, under the terms and conditions contained in the Joint Proposal, including the certificate conditions and Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations.

The basis of the need for the facility pursuant to PSL §126(1)(a)

The addition of new generation facilities is needed to displace or retire generation from older, less efficient generation facilities dispatched on High Energy Demand Days. The NYISO January 13, 2009 Reliability Needs Assessment, and the NYISO May 19, 2009 Comprehensive Reliability Plan encourage competitive markets for wholesale and retail supply, such as BEC will provide. The New York City Economic Development Corporation's Master Electrical Transmission Plan for New York City, dated May 28, 2009 finds increased benefits will result from additional in-City generation, and from a transmission and generation project developed before such additions become needed. Clean, efficient new generation will bring economic and environmental benefits to City and state consumers. The addition of the Facility by the fourth quarter of 2011 protects the state electricity supply against any of a number of contingencies, including that other planned projects are not accomplished; generator retirements result from relicensing disapproval; generator retirements resulting from planned emissions control requirements in the event of federal Clean Air Act National Ambient Air Quality Standards or climate change programs or legislation; reduced availability of demand response or energy efficiency reductions; or other risk factors that could affect future system reliability.

The nature of the probable environmental impact pursuant to PSL §126(1)(b)

The nature of the probable environmental impact of the Transmission Facility will be localized and temporary in that it will use low-impact installation technologies (jet-plow embedment, and horizontal directional drilling (HDD)) and will be constructed in a narrow corridor along the seabed of New York's Upper Bay and Gowanus Bay. No significant impacts are expected to result from cable system

construction or operation with regard to the physical or chemical properties of existing surface and near-surface marine sediments, resultant suspended sediment effects, and water quality. Any changes in turbidity are expected to be localized and temporary (and subject to a suspended solids monitoring provision set forth below).

Impacts on finfish and commercial shellfish during construction are expected to be minimal. No impact on aquatic resources is expected as a result of the cable's operation. No significant impacts on visual or cultural resources will result from any of the structures or equipment associated with the proposed Transmission Facility. All of the construction methods for this Project will be contained in the EM & CP and will be designed to minimize impacts on the physical and human environment.

The facility represents the minimum adverse environmental impact pursuant to PSL §126(1)(c)

The Transmission Facility will deliver 512 MW of dedicated power generation to NYISO Zone J, with air permit emissions limitations that already satisfy or exceed HEDD and NO_x RACT regulations and proposals in New York and New Jersey. The operation of the BEC Project and the Transmission Facility is expected to reduce emissions per megawatt hour as a consequence of the Project's displacement of older,

dirtier generation units, because the BEC Project will operate more efficiently while employing state-of-the-art emissions controls.

No right-of-way exists that could be expanded to accommodate the Project's proposed Transmission Cable Route.

Therefore, the Transmission Facility, as approved, represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations such as the effects on agricultural lands, wetlands, parklands and river corridors because the installation of the cable in compliance with the proposed Certificate Conditions is expected to produce only localized and temporary impacts.

A portion of the facility shall be located underground, pursuant to PSL §126(1)(d)(1)

In compliance with PSL §126(1)(d)(1), the Transmission Facility will be located underground except for structures and a short section of cable within the Gowanus Substation site.

Except for approximately 20 to 25 feet of the upland cable on the Gowanus Substation property, the Transmission Facility is designed for underground installation, and no party has challenged BEC's proposal to place the Transmission Facility underground. In New York State, 2.45 miles of the Submarine Transmission Cable will be buried at a depth consistent with the requirements of the Certificate Holder's U.S. Army Corps of Engineers permit along the proposed route detailed in the Application. The New York Landfall portion of the Submarine Transmission Cable, approximately 720 feet in length, will be installed in HDD Conduits beneath the 25th Street Pier in Brooklyn, New York. The HDD Conduits will terminate at three Transition Vaults to be located on the Gowanus Substation property. From the Transition Vaults an approximately 720 foot long section of the Upland Transmission Cable will be buried within the Gowanus Substation property in a duct bank approximately 3.5 feet below grade, to a point approximately 20 to 25 feet from the Electrical Interconnection. From that point, the Upland Transmission Cable will be located above ground to the Electrical Interconnection in the Gowanus Substation.

The facility conforms to long-range plans for the expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and will serve the interests of electric system economy and reliability pursuant to PSL §126(1)(d)(2)

The Transmission Facility conforms to a long-range plan for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, which will serve the interests of electric system economy and reliability

First, the proposed BEC Facility is consistent with the Draft State Energy Plan (Plan). Maintaining reliability of energy supply and a robust delivery infrastructure are among the Plan's objectives. The Plan identifies the concern that "[u]ncertainty with regard to infrastructure siting and interconnection ...discourage[s] needed infrastructure development and increase[s] costs for New York's citizens".¹⁹ In addition, the certification of the Facility comports with the Plan's goal of reducing public health and environmental risks. A shift to cleaner carbon-based fuels, in addition to increased reliance on energy efficiency and renewable-fueled generation, is included among the measures to accomplish this goal. The record Dispatch and Environmental Analysis establishes that the Facility will result in lower pollutant emissions.²⁰

Second, NYISO has implemented a Comprehensive Reliability Planning Process to ensure the continued reliability of the electric grid. As part of that process, NYISO issued its 2009 Reliability Needs Assessment ("NYISO 2009 RNA") in January 2009 and its 2009 Comprehensive Reliability Plan ("NYISO 2009 CRP") in May 2009. These assessments and plans encourage competitive markets for both wholesale and retail supplies. The BEC Project and the Transmission Facility will provide system reliability enhancements via upgrades to the Gowanus Substation, black-start capability during major power outages, and a submarine transmission cable providing transmission system delivery diversity. The BEC Project and the Transmission Facility provide the flexible supply reliability for Zone J that anticipates and helps meet the goals of environmental programs for wind generation, new programs to control NOx emissions, and programs for Regional Greenhouse Gas Initiative initiatives.

¹⁹ Draft State Energy Plan (August 2009), §1.1.1, p. 2.

²⁰ Draft State Energy Plan (August 2009), §1.1.4, p. 5.

Third, BEC provides security for any unexpected retirements of generation plants and demand reductions below NYISO 2009 RNA projections. The Project's black-start capability will allow the generating facility to go from a shutdown condition to an operating condition, and start delivering power without assistance from the power system.

The BEC Project and the Transmission Facility also provide cost and reliability savings attributable to BEC's ability to be on-line the fourth quarter of 2011, should other market-based projects, new transmission projects, or other upgrades not be accomplished by then, or should wind generation not be available in a load-following manner, or should generator retirements occur as a result of relicensing disapproval or the costs of planned environmental requirements. Based on the analyses of need within the Zone J market, this 345 kV Transmission Facility, supports a dedicated electric generating project that will interconnect into NYISO Zone J and operate as a dedicated intermediate resource providing reliability enhancements to the 2009 CRP's forecasted requirements. The Transmission Facility and the BEC Project not only provide transmission for new, low-emission generation, but also provide timely support against reliability sensitivities and scenarios that could adversely affect the implementation of the reliability plan and future system reliability.

Fourth, the Facility conforms to the New York City Economic Development Corporation's Master Electrical Transmission Plan for New York City ("NYCEDC Plan") (May 28, 2009). The NYCEDC Plan analyzes the economic and environmental impacts of various proposed and conceptual transmission and generation projects that could improve power supply to the City, and provides recommendations for further action to meet the City's energy needs in an efficient and clean manner. The NYCEDC Plan is primarily an economic evaluation of transmission options to serve the City's energy needs, though it did include three generation options as points of comparison. The BEC Project fulfills the NYCEDC option of: "A 500 MW simple cycle gas turbine (SCGT) plant connected to the Gowanus substation." NYCEDC Plan, §1.2, p. 12. Moreover, the BEC Project will operate at higher capacity factors and more efficiently. Further, the risks and costs of the BEC Project will be borne by a private

developer, a public benefit not considered by the NYCEDC Plan. Because the Transmission Facility will serve as a dedicated generator lead connected directly to the Gowanus Substation, unaffected by existing constraints on transmission into the City, the BEC Project is considered in-City generation. The facility comports with the NYCEDC Plan's reference case assumptions that include in-City generation. The NYCEDC Plan found that "the development of a transmission or generation project before the point at which such a project would be needed to satisfy reliability criteria would result in increased benefits for City consumers." NYCEDC Plan §1.4, p. 22. The NYCEDC Plan recommends the pursuit of clean, efficient in-City generation capability, as such capability would provide substantial economic benefits to City and State consumers. NYCEDC Plan §1.4.1, p. 22. The NYCEDC Plan also states that "adding clean, efficient generation to NYC will displace older, less-efficient sources of energy, reducing emissions." NYCEDC Plan §1.4.2, p. 28. The BEC Project will provide the reliability, cost, and environmental benefits identified by the NYCEDC Plan.

The Transmission Facility will serve the public interest, convenience and necessity because it will, with minimum environmental impact, provide needed electricity in New York's Zone J, enhance fuel diversity, improve system reliability, enhance opportunities for market-based transactions, and through the opportunity to displace existing older and dirtier generation sources, provide environmental benefits.

The location of the facility as proposed conforms to applicable state and local laws pursuant to PSL §126(1)(f)

The location of the Transmission Facility conforms to applicable State and local laws and regulations in compliance with PSL §126(f). If during the design and construction of the Project, BEC identifies a state or local ordinance, law, regulation, or other action requiring an approval, consent, permit, certificate or other condition that is unreasonably restrictive as applied to the BEC Project or the Transmission Facility, BEC may, with notice to the Active Parties List and the affected state or local authority, apply to the Commission for relief from such requirement pursuant to PSL §130.

First, the Transmission Facility will be in compliance with the New York City Zoning Resolution. The New York Upland Cable Route is located within an M3-1

Heavy Manufacturing District. M3-1 Heavy Manufacturing Districts permit heavy manufacturing uses as-of-right. Heavy manufacturing uses include electric utility substations, with no limitation as to size. The Gowanus Substation is permitted as-of-right as an electric utility substation. The BEC Project's Upland Cable will be an accessory structure to the Gowanus Substation, and will therefore constitute a permitted as-of-right use. *See* NYC Zoning Resolution §§12-10 (Definition of "Accessory use, or accessory"), 42-14(C) ("Use Group 17, Miscellaneous Uses"). The BEC Project will comply with applicable bulk regulations under the New York City Zoning Resolution, as discussed in the Application. The BEC Project will also comply with relevant height, waterfront zoning, parking, and performance regulations of the Zoning Resolution.

Second, the BEC Project will comply with the substantive requirements of the New York City Administrative Code, including applicable noise mitigation and construction regulations.

Third, the BEC Project will comply with New York City Rules and Regulations, including requirements of the Department of Buildings, the Department of Business Services, and the Department of Environmental Protection.

Fourth, the BEC Project will comply with the New York City Charter. BEC will obtain the necessary rights for construction, operation, and maintenance of the landfall portion of the Submarine Transmission Cable and associated HDD Conduits and other structures, as may be required by the City of New York. The BEC Project will comply with all substantive requirements relevant to waterfront property that are imposed by the Department of Business Services.

Fifth, the Project's design and construction will conform to the New York State Building and Fire Prevention Code, as well as the National Fire Protection Association Standards, the Electric Safety Code and applicable ANSI standards.

Sixth, the location of the Transmission Facility conforms to applicable state and local laws and regulations. The upland portion of the Transmission Facility will be buried and connected to the Gowanus Substation in conformance with NYISO and Con Edison safety and construction requirements.

The facility will serve the public interest, convenience and necessity pursuant to PSL §126(1)(g)

This Facility is of value to the region's electric transmission and distribution system. Construction of the Facility will result in minimal environmental impacts to residential and commercial operations in the area. The Facility will provide needed black-start capability, reduce the emissions associated with electric generation, improve the efficiency of the State's generation resources, and contribute to ensuring that, should expected energy resources fail to be available, reliability is not threatened. In addition, the Facility will enable the addition of generation resources for New York City that will be considered "in-City".

The Certificate of Environmental Compatibility and Public Need is granted, subject to the terms and conditions in this Order, and in the certificate conditions and Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations attached and appended thereto, and contained in the ordering clauses stated below.

The Commission orders:

1. The terms and provisions of the October 5, 2009 Joint Proposal submitted by Bayonne Energy Center, LLC., and Department of Public Service Staff, and attached to this order, are adopted and made a part of this order.

2. The terms of the Proposed Certificate Conditions, included as Appendix A to the Joint Proposal, are hereby approved, and incorporated into this order, including the requirement that the Certificate Holder shall, within 30 days after the issuance of the Certificate, submit to the Public Service Commission a verified statement that it accepts and shall comply with the Certificate and the conditions placed upon the Certificate.

3. The terms of the Bayonne Energy Center Project Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations, dated September 9, 2009, included as Attachment 1 to Appendix A of the Joint Proposal, are hereby approved and incorporated into this order.

4. The terms of the proposed §401 Water Quality Certification, pursuant to §401 of the Clean Water Act, 33 U.S.C. §1341(a)(1) and PSL Article VII are adopted,

and it is hereby certified that if BEC submits an acceptable Environmental Management and Construction Plan (EM & CP) and complies with all conditions contained in the Joint Proposal and this order, construction of the Facility will comply with the applicable requirements of §§301, 302, 306, and 307 of the Clean Water Act, as amended, and will not violate New York State Water Quality standards and requirements.

5. Bayonne Energy Center shall file with the Commission for approval its EM & CP, consistent with the Certificate Conditions, no more than one year after the issuance of the Certificate.

6. Prior to the commencement of construction, Applicant will comply with those requirements of Public Service Law §68 that do not relate to the construction and operation of the Facility, by filing a petition with the Commission and obtaining permission and approval as an electric corporation.

7. This proceeding is continued.

By the Commission,

(SIGNED)

JACLYN A. BRILLING
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

-----X

Case 08-T-1245: Application of Bayonne
Energy Center, LLC for a Certificate of
Environmental Compatibility and Public Need
Pursuant to Article VII of the Public Service
Law.

-----X

JOINT PROPOSAL

Albany, New York
Dated: October 5, 2009

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 08-T-1245: Application of Bayonne Energy Center, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law.

JOINT PROPOSAL

THIS JOINT PROPOSAL is made on the fifth day of October, 2009, by and among Bayonne Energy Center, LLC ("BEC"), Staff of the New York State Department of Public Service ("DPS Staff"), Staff of the New York State Department of Environmental Conservation ("NYSDEC Staff"), Staff of the New York City Economic Development Corporation ("NYCEDC Staff"), and the City of New York (the "City") (collectively, the "Signatory Parties").

Introduction

WHEREAS, on October 17, 2008, and supplemented on December 5, 2008, and on January 21, 2009, BEC filed an application (the "Application") with the New York State Public Service Commission (the "Commission") seeking a Certificate of Environmental Compatibility and Public Need ("Certificate") pursuant to Article VII of the Public Service Law for the construction, operation, and maintenance of the New York portion of the Bayonne Energy Center Project ("Project"), a 345 kilovolt ("kV") alternating current ("AC") submarine electric cable system ("Submarine Transmission Cable") and associated upland cable ("Upland Transmission Cable") and interconnection equipment (collectively, the "Transmission Facility"), to connect a new 512 megawatt ("MW") multi-unit, simple-cycle natural gas-fired (with ultra low sulfur diesel oil as a backup fuel) generating facility to be located in Bayonne, New Jersey (the "Bayonne Energy Center"), to the New York Independent System Operator ("NYISO") electrical grid at the Consolidated Edison Company of New York, Inc. ("Con Edison") substation in Brooklyn, New York ("Gowanus Substation").

WHEREAS, prior to filing the Application, BEC representatives met and exchanged information regarding the Project with DPS Staff, NYSDEC Staff, and staff of the New York State Department of State's Division of Coastal Resources. BEC also met with numerous other stakeholders and governmental authorities including the Brooklyn and Staten Island Borough Presidents, Con Edison, the Empire State Development Corporation, the New York City Economic Development Corporation, Lafarge North America, Inc., New York Sand & Stone, LLC, the New York Independent System Operator, Inc. ("NYISO"), the Port Authority of New York and New Jersey, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the U.S. Coast Guard, and the Harbor Safety, Operations, and Navigation Committee of New York and New Jersey.

WHEREAS, on October 17, 2008, BEC filed a Motion for an Expedited Proceeding pursuant to 16 N.Y.C.R.R. § 85-2.16. On November 17, 2008, BEC published a notice of its Motion for an Expedited Proceeding in the New York Post, a newspaper of general circulation in the Project area. BEC withdrew this motion on March 23, 2009.

WHEREAS, on December 5, 2008 and January 21, 2009, BEC supplemented the Application with additional materials responsive to requests of the Commission and DPS Staff.

WHEREAS, on January 29, 2009, the Secretary of the Commission informed BEC that the Application complied with Public Service Law § 122 as of January 21, 2009.

WHEREAS, on February 3, 2009, NYSDEC Staff sent BEC a letter presenting questions regarding the Project. BEC responded to NYSDEC Staff's letter on March 12, 2009, and augmented its response on May 20, 2009.

WHEREAS, on February 18, 2009, DPS Staff served BEC with 12 interrogatories. BEC responded to the interrogatories on February 24, 2009 and March 2, 2009.

WHEREAS, a Public Statement Hearing regarding the Application was held at the Commission's offices at 90 Church Street in New York City, New York, before Administrative Law Judge ("ALJ" or "Judge") Eleanor Stein and Commissioner Patricia L. Acampora on March 24, 2009. A procedural conference was also held on March 24, 2009 before Judge Stein, and was attended by BEC, DPS Staff, NYSDEC Staff (by telephone), and representatives of Con Edison (by telephone).

WHEREAS, on April 6, 2009, BEC provided NYSDEC Staff with a draft *Suspended Solids/Water Quality Monitoring Plan for Jet Plow Embedment Operations* ("draft TSS/WQ Monitoring Plan"). NYSDEC Staff sent BEC a letter presenting questions on the draft TSS/WQ Monitoring Plan on April 22, 2009. BEC responded to NYSDEC Staff's letter on May 28, 2009.

WHEREAS, on April 9, 2009, Judge Stein issued a ruling adopting the schedule agreed to by the parties at the March 24, 2009 procedural conference in the event the proceeding is contested.

WHEREAS, on May 8, 2009, Judge Stein issued a Notice of Evidentiary Hearing, based on the schedule adopted in the above April 9, 2009 "Ruling Establishing Schedule."

WHEREAS, after exploratory discussions among the parties, a Notice of Impending Negotiations was sent to all interested persons on June 5, 2009 and the Notice of Impending Negotiations was duly filed with the Secretary of the Commission by letter of the same date. A settlement conference was noticed on June 5, 2009, and held at the offices of the Department of Public Service in Albany, New York on June 19, 2009. This conference was attended by BEC, NYSDEC Staff, DPS Staff, and Con Edison.

WHEREAS, settlement is feasible because, after a review of the Application, its supplements, BEC's responses to interrogatories and other inquiries, and the draft TSS/WQ Monitoring Plan, the Signatory Parties understand the Project and recognize that a joint proposal of terms and conditions of the Certificate can be accomplished. The Signatory Parties also believe that this Joint Proposal will further the objective of giving fair consideration to the interests of the State of New York and electricity consumers in assuring the provision of safe and reliable service and furthering the establishment of competitive electric markets.

WHEREAS, the Signatory Parties have stipulated below to the factual and legal issues for which the Signatory Parties are in agreement.

WHEREAS, the Signatory Parties have prepared proposed Certificate Conditions ("Certificate Conditions") that the Signatory Parties are in agreement upon, and have attached the Certificate Conditions as Appendix A hereto.

WHEREAS, the Signatory Parties agree that no issues require adjudication and acknowledge that no adjudicatory hearings have been held.

THEREFORE, in consideration of the foregoing and the mutual undertakings set forth herein the Signatory Parties agree as follows.

Terms of Joint Proposal

A. General Provisions

1. Each provision of this Joint Proposal is in consideration and support of all of the other provisions of this Joint Proposal and is expressly conditioned upon the approval of the terms of this Joint Proposal in full by the Commission. If the Commission fails to adopt the terms of the Joint Proposal, the parties to the Joint Proposal shall be free to pursue their respective positions in this proceeding without prejudice.

2. The terms and provisions of this Joint Proposal apply solely to, and are binding only in, the context of the purposes of this Joint Proposal. None of the terms or provisions of this Joint Proposal and none of the positions taken herein by any party may be referred to, cited or relied upon in any fashion as precedent or otherwise in any other proceeding before this Commission or any other regulatory agency or before any court of law for any purpose, except in furtherance of ensuring the effectuation of the purposes and results of this Joint Proposal.

3. The Signatory Parties agree to submit this Joint Proposal to the Commission along with a request that the Commission expeditiously adopt the terms and provisions of the Joint Proposal as set forth herein.

4. The Signatory Parties recognize that certain provisions of the Joint Proposal contemplate actions to be taken in the future to fully effectuate this Joint Proposal. Accordingly, the Signatory Parties agree to cooperate with each other in good faith in taking such actions.

5. In the event of any disagreement over the interpretation of this Joint Proposal or implementation of any of the provisions of this Joint Proposal, which cannot be resolved informally among the Signatory Parties, such disagreement shall be resolved in the following manner: (a) the Signatory Parties shall promptly convene a conference and in good faith attempt to resolve any such disagreement; and (b) if any such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter.

6. This Joint Proposal shall not constitute a waiver by BEC of any rights it may otherwise have to apply for additional or modified permits, approvals, or certificates from the Commission, New York State Department of Environmental Conservation ("NYSDEC"), or any other agency in accordance with relevant provisions of law.

7. This Joint Proposal is being executed in counterpart originals, and shall be binding on each Signatory Party when the counterparts have been executed.

B. The Evidentiary Record

The following items constitute the Evidentiary Record in this proceeding.

1. Letter from Ruth L. Pierpont, State Historic Preservation Office ("SHPO") at the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP") to Sarah K. Faldetta, ESS Group, Inc., dated May 13, 2008, finding that construction and operation of the Project at the New York Landfall would have no effect upon cultural resources in, or eligible for inclusion in, the National Register of Historic Places.
2. Letter from Douglas P. Mackey, SHPO at OPRHP to Sarah K. Faldetta, ESS Group, Inc., dated October 14, 2008, finding that the construction and operation of the Project would have no effect

upon cultural resources in New York waters that are in, or eligible for inclusion in the National Register of Historic Places.

3. The Application of BEC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the construction of the New York State portion (Kings County) of a 6.6-mile 345 kV AC 3 Phase Circuit Submarine Electric Transmission Facility, filed on October 17, 2008.
4. The Prefiled Direct Testimony in Support of the Application, filed October 17, 2008, of: J. Lee Cox; Peter A. Valberg, Ph.D.; Paul A. Barnett; Sarah K. Faldetta; William Heeney; Susan M. Herz; Charles J. Natale, Jr.; Howard R. Quin, Ph.D.; and Payson R. Whitney, III.
5. Letter to Stephen L. Gordon, Esq. and Neil Collins, Bayonne Energy Center, LLC, from Jaclyn A. Brilling, Secretary to the Commission, dated November 21, 2008, regarding the completeness of application materials under Public Service Law ("PSL") § 122.
6. Letter to Jaclyn A. Brilling, Secretary to the Commission, from Stephen L. Gordon, Esq., counsel to Bayonne Energy Center, LLC, dated December 4, 2008, enclosing the following supplemental application materials:
 - a. Figure S-1;
 - b. Certified statement of Paul A. Barnett, Addendum to Exhibit 9 of the Application;
 - c. Minutes of the October 14, 2008 meeting of the NYISO Transmission Planning Advisory Subcommittee;
 - d. Minutes of the October 23, 2008 meeting of the NYISO Operating Committee.
7. Letter to Stephen L. Gordon, Esq. and Neil Collins, Bayonne Energy Center, LLC, from Jaclyn A. Brilling, Secretary to the Commission, dated January 13, 2009, regarding the completeness of application materials under PSL § 122.
8. Letter to Jaclyn A. Brilling, Secretary to the Commission, from Stephen L. Gordon, Esq., counsel to Bayonne Energy Center, LLC, dated January 20, 2009, enclosing the following supplemental application materials:
 - a. Figure S-2;
 - b. Figure S-3;
 - c. Figure S-4.
9. Letter to Stephen L. Gordon, Esq. and Neil Collins, Bayonne Energy Center, LLC, from Jaclyn A. Brilling, Secretary to the Commission, dated January 29, 2009, regarding the completeness of application materials under PSL § 122.
10. Letter to Payson R. Whitney, III, ESS Group Inc., from Betsy Hohenstein, NYSDEC, dated February 3, 2009, with the comments of NYSDEC on the Application.
11. Electronic mail from David Drexler, Assistant Counsel, NYSDPS, to Stephen L. Gordon, Esq., dated February 18, 2009, transmitting NYSDPS Interrogatories 1 through 12.

12. Electronic mail from Stephen L. Gordon, Esq., counsel to Bayonne Energy Center, LLC, to David Drexler, Assistant Counsel, NYSDPS, dated February 24, 2009, transmitting BEC's responses to NYSDPS Interrogatories 1, 3, 4, and 12.
13. Electronic mail from Stephen L. Gordon, Esq., counsel to Bayonne Energy Center, LLC, to David Drexler, Assistant Counsel, NYSDPS, dated March 2, 2009, transmitting BEC's responses to NYSDPS Interrogatories 2, 5, 6, 7, 8, 9, 10, and 11.
14. Letter from Payson R. Whitney, III, ESS Group, Inc., to Betsy Hohenstein, NYSDEC, dated March 12, 2009, responding to comments in NYSDEC's letter of February 3, 2009.
15. Letter from Jeff Zappieri, Supervisor of Consistency Review, New York State Department of State, to Payson R. Whitney, III, dated March 31, 2009, conveying the Department of State's concurrence with BEC's consistency certification under the Coastal Management Program.
16. Letter from Betsy Hohenstein, NYSDEC, to Payson R. Whitney, III and Susan M. Herz, ESS Group, Inc., dated April 22, 2009, with comments of NYSDEC on the draft TSS/WQ Monitoring Plan.
17. Letter from Payson R. Whitney, III, ESS Group, Inc., to Betsy Hohenstein, NYSDEC, dated May 20, 2009, further responding to comments in NYSDEC's letter of February 3, 2009.
18. Letter from Payson R. Whitney, III, ESS Group, Inc., to Betsy Hohenstein, NYSDEC, dated May 28, 2009, responding to comments of NYSDEC on the draft TSS/WQ Monitoring Plan.
19. Letter from Betsy Hohenstein, NYSDEC, to Payson R. Whitney, III and Susan M. Herz, ESS Group, Inc., dated June 24, 2009, responding to the draft TSS/WQ Monitoring Plan.
20. Letter from Stephen L. Gordon, Esq., counsel to Bayonne Energy Center, LLC, to David Drexler, Assistant Counsel, NYSDPS, dated September 18, 2009, transmitting the Levitan & Associates, Inc. ("LAI") Dispatch and Environmental Results.
21. This Joint Proposal.

The Signatory Parties herewith provide the necessary affidavits that will permit the prefiled testimony, exhibits, and appendices comprising the Application and the supplemental exhibits agreed upon by the Signatory Parties and attached to this Joint Proposal to be admitted as record evidence in this proceeding.

C. Location and Basis of Need

The Evidentiary Record describes the proposed Transmission Facility and its location, and explains the basis of the need for it, in accordance with Public Service Law ("PSL") § 126(1)(a).

Location

1. The location of the Transmission Facility is described in the Evidentiary Record, and as follows. BEC proposes to construct, operate and maintain the Bayonne Energy Center Project, a new 512 MW multi-unit, simple-cycle natural gas-fired (with ultra low sulfur diesel oil as a backup fuel) electric generating facility to be located in Bayonne, New Jersey, and a new 345 kV AC submarine electric transmission cable system routed from Bayonne, New Jersey to Brooklyn, New York. The portion of the BEC Project that is the subject of this Application for a Certificate under Article VII of the PSL is the construction, operation, and maintenance of the Submarine and Upland Transmission Cable System between the New York-New Jersey state line in Upper New York Bay and the point of interconnection

(the "Electrical Interconnection") with the existing Con Edison Gowanus Substation in Brooklyn, New York.

2. In New Jersey, the proposed route of the Submarine Transmission Cable (the "Submarine Transmission Cable Route") begins on the south side of the Bayonne Energy Center. The Submarine Transmission Cable will enter the Kill Van Kull through a bulkhead at the BEC generating facility, and will for a short distance run perpendicular to shore before turning northeast to run generally parallel to shore in an area located between the U.S. Pierhead Line and the northern limit of the Kill Van Kull Federal Navigation Channel. After passing the area where the Kill Van Kull turns east near Constable Hook, the cable route will turn easterly and continue through the southwestern tip of Anchorage 20G. The route will turn to the north and pass the eastern edge of Anchorage 20G, crossing the seaward easterly end of the Port Jersey Channel, and enter the easterly side of Anchorage 20F, and will continue north through the now-deauthorized Claremont Terminal Channel, and enter the easterly side of Anchorage 20E.

3. From Anchorage 20E, the Submarine Transmission Cable Route will turn easterly to exit New Jersey waters and enter New York waters within the Anchorage Channel. The portion of the Submarine Transmission Cable Route within New Jersey waters is approximately 3.9 miles in length and the portion of the route within New York waters is approximately 2.4 miles in length.

4. The Anchorage Channel has an authorized depth of -45 feet mean low water ("MLW") in the area where the cable will cross. The Submarine Transmission Cable Route will continue easterly across the width of the Anchorage Channel and continue east into the Buttermilk Channel, a -40 foot MLW Federal Channel. After passing this area, the cable will continue east towards the intersection of Buttermilk Channel and Red Hook Channel (approximately 3,500 feet east of the New Jersey-New York state line).

5. The route will exit Buttermilk Channel and then turn south to enter the Red Hook Channel, a -40 foot MLW Federal Channel. The cable will be located within and along the westerly flank of the Red Hook Channel (just east and outside of Anchorage 21). At a point approximately 1,000 feet south of Green Buoy No. 11, the route will make a southeasterly diagonal crossing of Red Hook Channel. The route will turn south along the easterly flank of Red Hook Channel at a point approximately 1,300 feet northeast of Green Buoy No. 9. The route will continue south and then enter the Gowanus Bay Federal Channel, which is a -50 foot MLW Federal Channel. Within Gowanus Bay, the Submarine Transmission Cable Route will turn east and run through the northerly half of the Federal Channel. It will exit the Federal Channel in the middle of Gowanus Bay to the west of the Astoria Generating Gowanus Station. The route will then run east past the Astoria Generating Gowanus Station and turn southeasterly towards the landfall at a point northwest of the abutting pier that contains the Lafarge Cement Brooklyn Terminal (also known as the 25th Street Pier).

6. At this location, a temporary cofferdam will be installed landward of the U.S. Pierhead Line and dredged to accommodate installation of the Submarine Transmission Cable system via horizontal directional drilling ("HDD") methods. Landward of the upland HDD entry points, three transition vaults ("Transition Vaults") will be constructed to connect the Submarine Transmission Cable to the route of the Upland Transmission Cable ("Upland Transmission Cable Route"), and the electrical interconnection to the Gowanus Substation (the "Electrical Interconnection") (the Transition Vaults, Upland Transmission Cable Route and Electrical Interconnection are collectively referred to as the "New York Landfall"). Three HDD boreholes will be required. The cables will make landfall via conduits installed within the HDD boreholes.

7. The New York Landfall is located at an undeveloped, non-public parcel of land bounded as follows: to the south, by the Astoria Generating Gowanus Station pier; to the north, by the Lafarge Cement Brooklyn Terminal pier (25th Street Pier) and a narrow strip of land owned by the City and subject to an easement in favor of Con Edison; and to the east, by the Gowanus Substation at 25th Street and 3rd Avenue in Brooklyn.

8. Three Transition Vaults will be constructed on the vacant portion of the Gowanus Substation property. Three boreholes will be directionally drilled from the Transition Vaults out to the temporary cofferdam structure to be located offshore of the 25th Street Pier. The cofferdam structure will be located within the Gowanus Bay approximately 100 feet from the seaward end of the 25th Street Pier. Conduits will be installed in the HDD boreholes to protect and facilitate the pulling of the Submarine Transmission Cable from the channel bottom to the Transition Vaults, where it will be spliced with the Upland Transmission Cable. The Upland Transmission Cable will be installed in an underground duct bank between the Transition Vaults and the Electrical Interconnection in the Gowanus Substation. The Upland Transmission Cable route is approximately 720 feet long, and is located entirely on Con Edison property.

9. Near the point of interconnection within the Gowanus Substation, the cable system will transition to an aboveground connection of the cable to a new terminal ring bus within the Gowanus Substation, to make the Project's final connection to Con Edison's 345 kV electrical system. Approximately 20 to 25 feet of the Upland Transmission Cable will be located aboveground within the Gowanus Substation.

Basis of Need

The record describes the basis of the need for the Transmission Facility in compliance with PSL § 126(1)(a).

10. The addition of new generation facilities at a rate greater than the rate of growth of electric demand is necessary in order to displace or retire generation from older, inefficient facilities dispatched on High Energy Demand Days ("HEDD"). Such inefficient facilities provide power at high cost and emit more air pollution than newer, more efficient facilities, which implement state-of-the-art emissions controls.

11. NYISO has implemented a Comprehensive Reliability Planning Process to ensure the continued reliability of the electric grid. As part of that process, NYISO issued its 2009 Reliability Needs Assessment ("NYISO 2009 RNA") in January 2009 and its 2009 Comprehensive Reliability Plan ("NYISO 2009 CRP") in May 2009. Such assessments and plans, provided to the public, encourage competitive markets for both wholesale and retail supplies.

12. The Transmission Facility is expected to be able to deliver power in the fourth quarter of 2011. The Transmission Facility will provide reliability benefits to New York, consistent with the NYISO 2009 RNA and CRP, particularly in the event that:

- Other market-based projects, new transmission projects, or other planned additions or upgrades are not accomplished by the fourth quarter of 2011 (see NYISO 2009 RNA, *Executive Summary* at p. iii-iv; NYISO 2009 CRP *Executive Summary* at p. ii, § 3 at p. 14, § 3.1 at p. 16);
- Generator retirements occur as a result of relicensing disapproval (see NYISO 2009 RNA, *Executive Summary* at p. iii, § 5.1 at p. 5-3; NYISO 2009 CRP *Executive Summary* at p. iii-iv, § 2.1 at p. 5, § 3.1(2) at p. 16);
- Generator retirements occur as a result of planned emissions control requirements necessary to meet National Ambient Air Quality Standards under the federal Clean Air Act, or requirements under climate change programs or legislation (see NYISO 2009 RNA, *Executive Summary* at p. ii-iii, § 4.4.2 at p. 4-11 through 4-17, § 5.1 at p. 5-3, §

5.2.4 at p. 5-4 & 5-5, *Appendix D*, § D.1, at pp. 26-38; NYISO 2009 CRP *Executive Summary* at p. iv-v, § 2.1 at p. 4, § 3.2(3) at p. 19);

- Demand response reductions, under the New York Energy Efficiency Programs and Special Case Resources program, relied upon by the NYISO 2009 CRP, are non-responsive or are not available at forecast levels (see NYISO 2009 RNA § 4.4.2 at p. 4-15 through 4-16; NYISO 2009 CRP *Executive Summary* at p. ii, § 3.1(2) at p. 16).

13. The NYISO 2009 RNA indicates NYISO's increased reliance on Special Case Resources ("SCRs"). Under the NYISO Demand Response program, SCRs register to reduce power usage upon NYISO's request. The RNA and CRP rely on projected increases in registered SCRs, and note that "SCR resources will be called upon significantly more than current practice." NYISO 2009 RNA, at 4-15; see also NYISO 2009 CRP *Executive Summary* at p. ii, § 3.1(2) at p. 16. BEC will provide an additional resource to the NYISO thereby decreasing NYISO's reliance on SCRs, which may be more expensive and less reliable.

14. It is possible that SCR users will not always voluntarily respond to a NYISO request to cut power consumption. Similarly, SCRs may not continue to register at the rates projected by the 2009 RNA. The Transmission Facility, with its unique ability to deliver power from any combination or all of the BEC Project's eight generators, within 10 minutes of dispatch, will provide a reliability capacity addition to reduce risks associated with non-responsive SCRs or lower-than-projected registration of SCRs over the RNA's study period. See NYISO 2009 RNA § 4.4.2 at p. 4-15 through 4-16 (noting increased reliance on SCRs under certain scenarios); NYISO 2009 CRP *Executive Summary* at p. ii (noting increased reliance on SCRs under certain scenarios, and the need to track the implementation of SCR resources), § 3.1 at p. 16 (same).

15. In the 2009 RNA and CRP, NYISO identified several risk factors that could affect the implementation of the reliability plan and future system reliability. Examples presented by NYISO relevant to New York City include:

Implementation of new programs to control nitrogen oxides (NOx) emissions from fossil fueled generators, such as the Ozone Transmission [sic, should be "Transport"] Commission (OTC) High Electric Demand Days (HEDD) program and Department of Environmental Conservation (DEC) new NOx Reasonably Available Control Technologies (RACT) program, could adversely impact the reliability of the electric system. Implementation of the OTC-HEDD program could render some units unavailable and others limited to reduced output at times of peak energy needs. If such limitations curtailed the availability of up to 1,739 MW of load following boilers (LFBs) and up to 1,231 MW of high emitting combustion turbines (HECT), it would result in violations of the resource adequacy criterion in 2017 and 2018 respectively. If it is assumed that the implementation of [sic] new emission control program, such as NOx RACT, is required, it is reasonable to expect that up to 25% of affected units would not be able to retrofit to meet the requirements, resulting in up to 3,125 MW of capacity no longer being available to meet peak load conditions. *If such circumstances arise, and no other replacement resources result, the resource adequacy criterion would be violated for all years from 2009 through 2018. The NYISO urges the development of a broader range of regulatory initiatives in order to achieve compliance with the ozone standard through the reduction of NOx emissions from power plants that will maintain the reliability of the New York State bulk power system.* The United States Environmental Protection Agency (EPA) recently established a new ambient air quality standard for ozone at 75 ppb, which will significantly increase the magnitude of the challenge ahead.

NYISO 2009 CRP, p. 19 (emphasis added).

16. The U.S. Department of Energy has designated the New Jersey/New York City area as within the Mid-Atlantic Area National Interest Electric Transmission Corridor: "an area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers." 72 Federal Register 56992, 56992 (Oct. 5, 2007). BEC's addition of 512 MW of new supply, through the dedicated 345 kV Transmission Facility, will provide a significant increase in energy supply capability and a resultant enhancement in system reliability, without adding power demands on current transmission resources.

17. As part of the BEC Project's Electrical Interconnection, BEC is providing substantial reliability upgrades for the Gowanus Substation, expected to cost at least \$20 million, in the form of a ring bus which will provide Con Edison with a new north-south system connection in the Substation. Though these upgrades are required to interconnect the BEC Project into the Gowanus Substation, they also provide substantial net reliability and maintainability upgrades to the Substation. The Substation is currently comprised of two discontinuous 345 kV buses that each include a transformer, various feeders, and reactor components. There is effectively no redundancy of operation between the two buses because of this discontinuous design. In the upgrades being provided by the BEC Project, the two isolated 345 kV bus sections will be tied together. This will allow the transformer, feeders and reactor components of each bus to be fed from either of two different directions, which is not possible with the current design of the Substation. The planned upgrades will allow energy being delivered to the Gowanus Substation to continue to flow through un-faulted components when faults occur in components on either bus. This will provide Con Edison with flexibility in isolating faults on one feeder, reactor or transformer with minimal to no effect on adjacent power sources. As a result, the ring bus that the upgrades will create will allow power to be delivered through either transformer through un-faulted components of either bus. Because the BEC Project will be connected between breakers in the ring, its energy will continue to flow should certain elements serving the bus be removed by faults or for maintenance. This configuration will also allow Con Edison more flexibility in maintaining the Gowanus Substation in the future.

18. The BEC Project will also provide the City, NYISO Zone J, with new, directly linked and dedicated black-start generation capacity, increasing the system's ability to recover quickly from a major power outage.

19. The BEC Project and the Transmission Facility will provide dispatch reliability for programs encouraging wind generation. Electric generation capacity such as that provided by the BEC Project's eight-generator quick-start capability are needed to balance the load on transmission systems during fluctuations in the availability of wind-generated power.

20. The Transmission Facility and the Bayonne Energy Center, as a source of dedicated power generation responsive to intermediate mid-merit (daily, diurnal cycling) demand for electricity in the New York City area, will provide timely support against reliability risk factors. Mid-merit facilities operate at capacity factors that fall between (a) "base loaded" generators, which typically operate with capacity factors (i.e., actual output expressed as a percentage of total annual potential output) greater than 50%, and (b) "peaking" generators typically operating with capacity factors of less than 20%. Mid-merit demand for electric power is satisfied by electric generators typically operating in the range of 20% to 50% capacity factors. DPS Staff requested that BEC provide a Dispatch and Environmental Analysis ("Dispatch Analysis") of the proposed BEC Project. The LAI Dispatch Analysis captures the "intrinsic value" of the BEC Project based purely on the merit of its heat rate, fuel costs, and other performance parameters within the expected 2012 generation mix and load projection in NYC and the surrounding regions. The Dispatch Analysis indicates that BEC will have a capacity factor of between 15.8% and 16.4% based on the intrinsic modeling approach. The Dispatch Analysis does not include any "extrinsic value" based on the BEC Project's quick start operating characteristics which would allow it to satisfy real time market requirements not captured in LAI's deterministic dispatch analyses. BEC believes the Project will operate as a mid-merit facility over the life of the asset.

21. In NYISO's Day-Ahead Market, generation facilities are called into operation in order of their cost of service, in dollars per megawatt-hour as bid in the Day-Ahead Market. Units with the lowest operating cost (typically, units with low fuel costs and/or high efficiency) are called into operation for a higher percentage of the day, and units with higher operating costs are typically called into operation only after all other units with lower operating costs have been dispatched. As a result, electric generators with higher operating costs operate a smaller percentage of the time, and may only be called into operation during High Energy Demand Days ("HEDD"). Such HEDD units are typically peaking generators with low energy efficiency resulting in higher fuel use and higher emissions. These HEDD units do not typically incorporate modern emission control technologies because of the age of the units, or because they operate so few hours per year as to be exempt from requirements for such controls under current emissions regulations. The LAI Dispatch Analysis predicts that the more energy-efficient BEC Project, incorporating modern emission control technologies, will be dispatched before the older and more expensive gas turbines in Zone J, many of which are HEDD units and have NOx emission rates which are significantly greater than the Project's.

22. The role of the BEC Project and the Transmission Facility in the Day-Ahead Market will provide efficiency benefits to New York. For gas-fired generators, the most efficient generators, which emit lower quantities of air pollutants per megawatt-hour, are called into service before less efficient gas-fired generators, which typically emit more air pollution per megawatt-hour. As a result, newer generators such as the BEC generating facility, which is primarily gas-fired, will be called into service before less-efficient gas-fired generators, and always before pure "peaking" generators, which only provide energy during periods of high energy demand. The net effect is that energy offered through the Transmission Facility, as it is added to the generation mix in New York, is anticipated to displace energy from older, less efficient generator units, resulting in improvements in the cost of service and overall air quality.

23. The Transmission Facility will be uniquely able to deliver 512 MW of dedicated power generation to NYISO Zone J, with air permit emissions limitations that already satisfy or exceed HEDD and NOx RACT regulations in New Jersey and proposed HEDD and NOx RACT regulations in New York. See New Jersey Department of Environmental Protection, Bayonne Energy Center Air Pollution Control Operating Permit, Permit Activity No. BOP080001 (Sept. 24, 2009).

24. A 2008 NYISO presentation to the New York State Reliability Council and the NYSDEC presents a slide captioned, "As the NY Fleet Ages, New Clean Multi-fueled Generation Located Near Load Centers Will Reduce Reliability Concerns and Emissions." See NYISO, *RGGI and HEDD; Potential Impacts on Reliability* (April 21, 2008), at p. 14, available at <http://www.nysrc.org/pdf/MeetingMaterial/RRSMeetingMaterial/RRSagenda108/NYSDEC%20NYSRC%20April%2021%202008.pdf>. BEC will interconnect to the NYISO electrical grid at Con Edison's Gowanus Substation in Brooklyn, and as a result BEC is considered a Zone J "in-city generator" for electrical generation purposes. The BEC Project's design and equipment selection incorporates load-following and quick start capabilities and its multi-unit configuration provides inherent reliability features in both the modularity of the Project's dispatch and the ability to isolate downtime to individual units. As a result, the BEC Project, with its modern emission controls, is consistent with the NYISO's definition of a "New Clean Multi-fueled Generation Located Near Load Centers".

25. The New Jersey Department of Environmental Protection has proposed a NOx emissions limit of 2.5 ppm for the BEC Generation Facility in Bayonne. See Bayonne Energy Center Draft Air Pollution Control Operating Permit, cited in ¶ 23, above. This equates to approximately 0.085 lbs/MWh. When BEC produces 512 MW of power, its NOx emissions for that hour amount to 0.02 tons. NYISO has identified the New York City average NOx emissions from "Old Gas Turbines" as 6.80 lbs/MWh. See NYISO, *RGGI and HEDD; Potential Impacts on Reliability*, cited in ¶ 24 above. This equates to 6.80 lbs/MWh x 500 MW / 2,000 lbs/ton, or 1.7 tons per hour of NOx. Thus, whenever BEC operates, instead

of a NYC "Old Gas Turbine," BEC, in Bayonne, will displace nearly 2 tons of NOx emissions that would otherwise be emitted in NYC. The same analysis shows BEC would displace over 0.5 tons per hour of NOx for NYISO-identified NYC Load Following HEDD boilers, boilers that typically operate on high energy demand days.

26. The New York City Economic Development Corporation ("NYCEDC") recently commissioned a study, performed by CRA International, to develop a master electrical transmission plan for New York City. The result, *A Master Electrical Transmission Plan for New York City* ("NYCEDC Plan"), was finalized May 28, 2009. The NYCEDC Plan analyzes the economic and environmental impacts of various proposed and conceptual transmission and generation projects that could improve power supply to the City, and provides recommendations for further action to meet the City's energy needs in an efficient and clean manner. The NYCEDC Plan is primarily an economic evaluation of transmission options to serve the City's energy needs, though it did include three generation options as points of comparison. One of the generation options is similar to the BEC Project: "A 500 MW simple cycle gas turbine (SCGT) plant connected to the Gowanus substation." NYCEDC Plan, § 1.2, p. 12.

27. Among the key findings of the NYCEDC Plan is that from the City's perspective, the most attractive options under the NYCEDC Plan's reference case assumptions include in-City generation. The NYCEDC Plan found that "the development of a transmission or generation project before the point at which such a project would be needed to satisfy reliability criteria would result in increased benefits for City consumers." NYCEDC Plan § 1.4, p. 22. The NYCEDC Plan predicted that the simple-cycle gas turbine plant hypothesized in its study would create, in the year 2013, \$17 million in direct and indirect benefits for New York City. See NYCEDC Plan, Table 74, at pp. 130-31.

28. The NYCEDC Plan recommends the pursuit of clean, efficient in-City generation capability, as such capability would provide substantial economic benefits to City and State consumers. NYCEDC Plan § 1.4.1, p. 22. The NYCEDC Plan states that many private developers are unwilling to take the risks of developing in-City generation capacity. *Id.* The NYCEDC Plan also notes that a number of suitable sites for the potential development of new generation resources are available in New Jersey, connected through underwater generator leads to critical locations in the City's power grid. *Id.* The NYCEDC Plan also states that "adding clean, efficient generation to NYC will displace older, less-efficient sources of energy, reducing emissions." NYCEDC Plan § 1.4.2, p. 28.

29. The simple-cycle gas turbine plant hypothesized by the NYCEDC Plan is similar in many respects to the BEC Project, and the BEC Project will provide the reliability, cost, and environmental benefits identified by the NYCEDC Plan. However, the BEC Project is distinct from the SCGT hypothesized by the NYCEDC Plan, as the BEC Project will operate at higher capacity factors, and more efficiently. Further, the risks and costs of the BEC Project will also be borne by a private developer, a public benefit not considered by the NYCEDC Plan, as the NYCEDC Plan focused on projects suitable for development by a hypothetical public authority. Because the Transmission Facility will serve as a dedicated generator lead connected directly to the Gowanus Substation, unaffected by existing constraints on transmission into the City, the BEC Project is considered in-City generation.

Dispatch and Environmental Analysis

30. DPS Staff requested that BEC provide a Dispatch and Environmental Analysis ("Dispatch Analysis") of the proposed BEC Project. Levitan & Associates, Inc. ("LAI") performed the Dispatch Analysis for the BEC Project. The Dispatch Analysis adds to the record's demonstration of the basis of need for the BEC Project, and supports a determination that the BEC Project is in the public interest.

31. LAI assessed the dispatch and environmental effects for two load scenarios. The first scenario is based on the projected 2012 electric peak demand and load as identified by the New York Independent System Operator's April 2009 Load and Capacity Data "Gold Book," ("NYISO 2009 Gold

Book"). The second scenario used a slightly higher 2012 peak demand and load based on NYISO Zone J historical average growth rates in order to assess the expected Project dispatch without the current economic downturn that is reflected in the NYISO 2009 Gold Book.

32. The Dispatch Analysis captures the "intrinsic value" of the BEC Project based purely on the merit of its heat rate, fuel costs, and other performance parameters within the expected 2012 generation mix and load projection in NYC and the surrounding regions. The Dispatch Analysis does not include any "extrinsic value" based on the BEC Project's quick start operating characteristics which would allow it to satisfy real time market requirements not captured in LAI's deterministic dispatch analyses. Utilizing a dispatch simulation model allowed LAI to capture "portfolio" or secondary / indirect effects that the BEC Project would have on the NYISO and surrounding systems, such as the provision of ten-minute non-spinning reserves NYISO can call upon to respond to increases in energy demand.

33. Once the Dispatch Analysis was completed, the Environmental Analysis compared the 2012 air emissions of the power plants in Zone J, in the entire New York Control Area ("NYCA"), and in NYCA plus PJME with and without the addition of the BEC Project. LAI estimated power plant emissions for nitrogen oxides ("NOx"), sulfur dioxide ("SO2"), and carbon dioxide ("CO2").

34. The Dispatch Analysis predicts that the BEC Project will be dispatched before older and more expensive gas turbines in Zone J, many of which have NOx emission rates that are ten times and up to 100 times greater than the Project's. The Project will also be dispatched before expensive Special Case Resources and other peaking resources. LAI estimates in-City market energy prices would be lowered by 0.5% - 1.0% during those hours in which BEC is dispatched, and the Project will have mostly negligible energy price impacts in surrounding zones.

35. The Analysis also predicts that BEC will provide valuable energy reserves to NYISO when not operating, thus avoiding the need for NYISO to operate higher-emitting Zone J load-following boilers at minimum or part load. LAI estimates operation of load-following boilers, many of which are oil-fired, would be reduced by about 12% during on-peak hours and by about 21% during off-peak hours.

36. As a result, it is anticipated that the BEC Project will materially lower power plant air emissions in Zone J. In particular, for the Analysis' study year 2012 average emission reductions for the two study cases are as follows:

- NOx declines by 349 tons (12%);
- SO2 declines by 104 tons (25%); and
- CO2 declines by 407,000 tons (5%).

37. In addition to the Zone J air impacts, LAI estimates that Bayonne will lower power plant NOx emissions across NYCA and PJME.

D. Environmental Impacts

The record evidence demonstrates the nature of the probable environmental impact of the Transmission Facility, and the evidence and the Signatory Parties' agreed-upon Certificate Conditions demonstrate that the Transmission Facility represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations, in compliance with PSL §126(1)(b)&(c).

Topography, Geology, Soils, Sediments, and Groundwater

1. Application Sections 4.2 and 4.4 and the prefiled testimony of Sarah K. Faldetta and Payson R. Whitney, III, address the existing topography, geology, and soils, and potential impacts and mitigation measures.

2. The construction and operation of the Submarine Transmission Cable and the New York Landfall, including the Upland Transmission Cable and Electrical Interconnection in the Gowanus Substation will have negligible impacts on topography, geology, and soils. Potential Project impacts related to topography, geology, soils and sediments, and groundwater in New York State will be related primarily to temporary and short-term disturbance of soils and marine sediments during construction.

3. The aspects of the Project that could result in potential short-term impacts to the marine physical characteristics of the waterbodies crossed by the Submarine Transmission Cable are associated with construction of the Project. These construction activities are primarily the jet plow embedment of the three separate cable phases and relatively low-volume dredging within the temporary cofferdam at the New York Landfall. While no real project data is available at this time, the results of sediment dispersion modeling indicate that jetting of the Submarine Transmission Cable will likely result in localized and short-term increases in the amount of sediment in the water column available for transport by tidal currents. Based on the Model, the Project is not expected to result in significant increases in sediment transport in the immediate environment of the Project's construction ("the Project Area"). These predictive models also indicate that the amount of suspended sediment injected into the water column by the jetting operation for the majority of the project is within the range of natural and anthropogenic variability that presently exists in the Project Area.

4. Sediment dispersion modeling also indicates that dredging within the temporary cofferdam at the New York Landfall will only result in very localized and short term increases in the amount of suspended sediment in the water column available for transport by tidal currents. These levels of project-related suspended sediment are also well within the range of natural variability within this area of the Gowanus Bay. The temporary cofferdam walls, which will extend above mean high water during dredging, will contain sediments from dredging and limit the dispersion of the sediments suspended to the interior footprint of the temporary cofferdam. After construction of the Transmission Facility and cofferdam removal are complete, the dredged area within the temporary cofferdam will be backfilled with imported clean backfill material, as needed, to restore the seabed to preconstruction contours.

5. Environmental characteristics of excavated upland soils and fill will be assessed upon removal to ensure proper on-site handling and offsite disposal as may be required by the NYSDEC, as per applicable requirements, including 6 NYCRR Parts 360, 370, 371, and 376. Following installation of the Transition Vaults and the Upland Transmission Cable, associated excavations will be backfilled to finished grade using clean fill. Finished grade conditions on the Con Edison property may be slightly improved during final design to better manage and control post-construction stormwater run-off and to minimize potential surface soil erosion during operation. Disturbed areas will be re-stabilized and inspected to ensure proper function and control.

6. Mitigation measures to reduce temporary construction-related Project impacts will be fully detailed in an Erosion and Sedimentation Control and Stormwater Management Plan, which will be included in the Project's Environmental Management and Construction Plan ("EM&CP"). This plan will be prepared once final design has been completed, and will utilize applicable Best Management Practices ("BMPs") from the NYSDEC Technical and Operation Guidance Series ("TOGs") for erosion control and stormwater management in upland portions of the Project Area in New York. The EM&CP will also show grade changes and drainage enhancements, if appropriate. Project design and construction will be

conducted in accordance with applicable engineering and building standards, BMPs and regulatory standards.

7. Because no public or private supply wells are known to be located at or in the vicinity of the New York Landfall, no adverse impacts to groundwater are anticipated and no mitigation is warranted. No use of groundwater is proposed for the Transmission Facility.

Freshwater and Tidal Wetland Resources

8. Application Section 4.3 and the prefiled testimony of Charles J. Natale, Jr. address the potential impacts to state-regulated freshwater and tidal wetland resources.

9. Based upon existing published literature and agency consultation, there are no state-regulated vegetated freshwater or tidal wetlands within the Project Area in New York. The Project avoids direct impacts to freshwater and tidal wetlands since none are present in the Project Area. In addition, the use of HDD bores and conduits as a project impact mitigation measure avoids direct disturbance of existing shoreline area coastal environmental resources. Temporary impacts to waters of the United States will be limited to those portions of Upper New York Bay and Gowanus Bay (both navigable waterways) along and adjacent to the proposed Submarine Transmission Cable Route. These impacts will be limited to jet-plow embedment related effects.

10. Portions of the Project will be located within the mapped 100-year floodplain. The Submarine and Upland Transmission Cable Routes and the Transition Vaults will be located underground, thereby avoiding any changes to existing flood storage or storm damage prevention characteristics within the Project Area's 100-year floodplain. The Electrical Interconnection will be made via construction of new aboveground electrical components within the Gowanus Substation. The presence of these additional aboveground structures in the Gowanus Substation will not result in the loss of flood storage volume or capacity since the site is adjacent to a tidal waterbody. Any aboveground components constructed within the Gowanus Substation will be constructed in a manner that meets Federal Emergency Management Agency requirements for utilities located within a mapped flood hazard area.

Marine Physical Characteristics

11. Section 4.4 of the Application and the prefiled testimony of Payson R. Whitney, III, address the marine physical characteristics and potential impacts to water depths, currents, and the sediment transport regime in the Upper New York Bay and Gowanus Bay.

12. The results of sediment dispersion modeling indicate that jetting of the Submarine Transmission Cable will likely result in localized and short-term increases in the amount of existing suspended sediment in the water column that may be available for transport by natural tidal currents. In addition, the predictive modeling indicates that suspended sediment generated by the jetting operation will generally be deposited in a narrow corridor along the Submarine Transmission Cable Route rather than being transported far afield of the jetting operation. Therefore, based on the modeling, the Signatory Parties conclude that the Project is not expected to result in significant changes to natural sediment transport or deposition in the Project Area. Furthermore, the amount of sediment predicted to be temporarily suspended by the jetting operation appears to be well within the range of existing natural and anthropogenic variability in the Project Area.

13. Sediment dispersion modeling also indicates that dredging within the temporary cofferdam at the New York Landfall will only result in localized and short term increases in the amount of sediment in the water column available for transport by tidal currents. After construction of the Transmission Facility and cofferdam removal are complete, the dredged area within the temporary

cofferdam will be backfilled with imported clean backfill material to restore the seabed to preconstruction contours.

14. The use of HDD technology will avoid impacts to adjacent shoreline areas and route-specific nearshore bottom conditions by drilling under the natural seabed surface rather than excavating an open-cut trench that could result in much greater seabed and water-quality impacts as another feasible alternative. It is anticipated that potential project-related impacts of the HDD methods to the marine physical characteristics of the marine environment will be negligible to Gowanus Bay at the New York Landfall.

15. The jet plow embedment of the Submarine Transmission Cable will result in the direct disturbance and displacement of near-surface marine sediments along the alignment of each of the three individual cable trenches. Slight depressions in the seabed surface are anticipated post jetting as natural sediment infill and consolidation occurs within the limits of the trench-cut. These depressions are estimated to be two feet deep or less, but are expected to fill in naturally with time as a result of the natural sediment deposition and repositioning that occurs as a result of tidal currents, episodic storm events, and passage of vessels in Upper Bay and Gowanus Bay. Potential impacts to water depths are expected to be localized and temporary. Operation of the Submarine Transmission Cable will have no adverse impacts on water depths.

16. Installation and operation of the Submarine Transmission Cable will not result in adverse effects on natural tidal flow or volume conditions in the Kill Van Kull, Upper New York Bay, and Gowanus Bay as the submarine cable system will be installed in a buried configuration under the natural seabed.

17. Installation and operation of the Submarine Transmission Cable are not predicted to result in significant changes to the types of sediments or their natural bulk physical or chemical composition as presently exists along the Submarine Transmission Cable Route. Sediments will be temporarily suspended by the jet plow embedment process, and as a result, the distribution of sediment types (fine-grained versus coarse-grained) may be slightly different where jet-plowed suspended sediment is subsequently re-deposited on the seafloor. Predictive model assessments indicate that approximately 75% of the in-situ sediment disturbed by the jet-plow embedment process is expected to remain within the vertical limits of the trench and the balance of this sediment volume suspended by the jet plow is expected to settle into areas adjacent to the trench-cut alignment. Therefore, the impacts to sediment type are expected to be minimal.

Marine Sediment and Water Quality

18. Section 4.5 of the Application and the prefiled testimony of Charles J. Natale, Jr. and Susan M. Herz address marine sediment and potential impacts to water quality.

19. Studies performed by BEC, and included in the Evidentiary Record ("Record"), conclude that the planned cable installation is not expected to adversely impact aquatic biota. Pursuant to the Record, indirect impacts from installation of the Submarine Transmission Cable are anticipated to consist of a temporary and localized increase in suspended sediment concentrations in the water column in the areas adjacent to the jet-plowed trenches along the proposed route, which are predicted to pose only a temporary and minimal risk to environmental receptors within the Project Area when compared with the risks posed by the existing continuous interactive effects of human and natural influences on existing sediment conditions in Upper New York Bay and Gowanus Bay. Operation of the Submarine Transmission Cable is not predicted to have any adverse impact on sediment or water quality in Upper New York Bay or Gowanus Bay since it will be in a buried configuration well below the present seabed bottom.

20. Predictive modeling results indicate that potential jet-plow related impacts from the installation of each cable phase are expected to occur as isolated events, and will not result in cumulative

impacts to natural suspended sediment and water quality within the Project Area. These modeling results show that the 72-hour period between the end of jetting of one cable phase and commencement of jetting of the next cable phase allows enough time for suspended sediment to substantially re-deposit on the seafloor with ambient concentrations returning to natural conditions in short time frames.

21. Monitoring of suspended sediments, turbidity and water quality, and pre- and post installation benthic habitat will be performed prior to and during cable installation in accordance with the Proposed Certificate Conditions (Appendix A) and the *Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations* attached to the Certificate Conditions. Mitigation strategies will be implemented during installation if suspended solids concentrations exceed the threshold established in the Certificate Conditions.

22. A temporary cofferdam will be constructed in Gowanus Bay at the seaward end of the HDD boreholes to facilitate the transition between the HDD boreholes and the jet plow embedment. The cofferdam will be installed prior to the beginning of the HDD borehole construction and will remain in place until jet plow embedment of the Submarine Transmission Cable and transition to an upland cable configuration is complete. Mechanical dredging of sediments within the temporary cofferdam to accommodate the HDD boreholes and cable pulling will be conducted in accordance with the Proposed Certificate Conditions. All materials dredged in connection with the temporary cofferdam will be disposed of at an approved upland facility and will not be discharged in significant quantities back into the water column. The temporary cofferdam walls, which will extend above mean high water during dredging, will generally contain suspended sediments associated with dredging activities and hence control and limit the dispersion of the suspended sediments to the interior footprint of the temporary cofferdam.

23. In order to minimize impacts to water quality at the shoreline and nearshore areas to the greatest extent practicable, HDD construction methods will be used at the New York Landfall. The HDD operation will be designed to include a drilling fluid fracture or overburden breakout monitoring program to minimize the potential of drilling fluid breakout into waters of Gowanus Bay. The details of this program will be provided post-certification in the EM&CP. No adverse impacts to ambient water quality conditions are expected as a result of HDD installation.

24. A spill prevention and response plan (SPCC Plan) will be developed as part of the EM&CP and implemented during construction to avoid or minimize potential impacts to marine sediments and water quality that could result from spills of fuel, lubricating oils or other substances associated with marine installation vessels and construction equipment. This plan will be filed as part of the EM&CP submitted for the Project.

25. In-water cable installation operations will not be conducted between December 1 of any calendar year and May 31 of the following calendar year to avoid life-cycle or migratory impacts to striped bass, winter flounder, and anadromous fish populations using this area of Upper New York and Gowanus Bays, except that construction of the temporary cofferdam may be performed after March 31 and before November 15 of any calendar year. In case of hardship, BEC shall consult with NYSDEC and DPS and thereafter submit a petition to the Commission for approval to perform in-water construction work, provided that copies of the petition are served on all parties to this proceeding. Project-related in-water activities that may be undertaken at any time during project construction and operation include: benthic, geotechnical and archeological sampling and testing; marine surveys; mobilization and demobilization of vessels and equipment for cofferdam construction, dredging, and cable embedment; dredging within the cofferdam; post-construction surveys and sampling; locating and marking utility crossings and preparations to effect utility crossings; and, on prior notice to DPS and NYSDEC, emergency maintenance work as specified in the Proposed Certificate Conditions.

Finfish

26. Section 4.6 of the Application and the prefiled testimony of Charles J. Natale, Jr. and Susan M. Herz address the potential impacts of the Project on finfish.

27. Marine benthic and fisheries habitat in the vicinity of the Project Area has been significantly altered through filling, bulkheads, dredging, and commercial and industrial development within this active urban port area. As a result, the New York State Department of State, Division of Coastal Resources, has not designated any Significant Coastal Fish and Wildlife Habitat within the Project Area.

28. Fisheries habitat within the Project Area (including the Kill Van Kull, Upper New York Bay, and Gowanus Bay) has been designated as Essential Fish Habitat ("EFH") for 16 federally-managed fish species according to the Magnuson-Stevens Fishery Conservation and Management Act. These species include: red hake, winter flounder, windowpane flounder, Atlantic sea herring, bluefish, Atlantic butterfish, Atlantic mackerel, summer flounder, scup, black sea bass, king mackerel, Spanish mackerel, cobia, sand tiger shark, dusky shark, and sandbar shark.

29. Representative species of fish known to occur in the vicinity of the Project Area, as designated under the Fish and Wildlife Coordination Act, include: alewife, American eel, American shad, Atlantic menhaden, Atlantic tomcod, blueback herring, rainbow smelt, striped bass, tautog, and weakfish.

30. The installation of the temporary cofferdam is expected to begin after March 31 of any given installation year, such that cofferdam installation is completed prior to November 15 of the same year to avoid potential disturbance of spawning winter flounder. The cofferdam structure has been designed to largely contain the localized suspended sediment associated with dredging. Dredging within the cofferdam will begin after the temporary cofferdam support structure has been installed.

31. Potential impacts to finfish and finfish habitat from installation of the Submarine Transmission Cable will be localized and temporary, resulting from jetting activities and associated direct and indirect sediment disturbance. Sediment disturbance will be limited to the extent practicable through the use of low-impact jet plow embedment technologies. HDD techniques and installation of a temporary cofferdam that will contain sediment disturbed during dredging at the New York Landfall will avoid or minimize suspended sediment and turbidity effects in nearshore habitats.

32. Operation of the Submarine Transmission Cable will have no adverse impact on surface sediment conditions or water quality in Upper New York Bay or Gowanus Bay. The three phases of the Submarine Transmission Cable will be buried to a target depth of 15 feet below present bottom, and will therefore not create a physical barrier that could interfere with fish migration or use of existing habitats or nursery areas. Potential impacts to fish species from electromagnetic/thermal emissions during the normal operation of the Submarine Transmission Cable are expected to be negligible as a result of the proposed depth of burial as well as the horizontal separation of the three phase cable burial configurations.

33. As a result, construction of the Transmission Facility is expected to result in only localized and temporary impacts to finfish in the Project Area, and operation of the Transmission Facility is expected to result in negligible impacts.

Benthic Resources

34. Section 4.7 of the Application and the prefiled testimony of Charles J. Natale Jr. address the potential impacts of the Project on benthic resources.

35. The Project has been sited and designed and will be operated and maintained in a manner that will avoid or minimize impacts to benthos and shellfish. Due to the use of jet-plow embedment technology and HDD construction methods, benthic community impacts are anticipated to be limited in scope, both temporally and spatially. Direct impacts, including displacement or mortality due to abrasion, entrainment, or removal from the benthic environment, are predicted to be limited to the areas of active cable installation and cofferdam dredging. Indirect impacts, including temporary increases in suspended sediment concentrations and re-deposition of these sediments, may extend beyond the immediate area of active construction, but are likely to be temporally and spatially limited in extent. It is predicted that in a relatively short period of time after jetting that the benthic population will restore itself to pre-construction conditions, and this benthic recovery will be monitored post-installation and compared with pre-installation results, as part of the environmental monitoring plan for the project.

36. HDD techniques and installation of a temporary cofferdam that will contain sediment disturbed during dredging at the New York landfall will also minimize suspended sediment and turbidity effects in nearshore benthic habitats. The use of jet plow embedment and HDD construction methods, along with the opportunistic recolonization of benthic organisms following construction activities, are expected to minimize impacts to the benthic community.

37. Operation of the Submarine Transmission Cable is anticipated to have no adverse impacts to benthos and shellfish resources. The Submarine Transmission Cable will be buried to a target depth of 15 feet below the present seabed. The Cable System utilizes a solid dielectric design which does not contain or need dielectric cooling fluids, thus eliminating the potential for such fluids to be released into the environment.

Terrestrial Wildlife and Protected Species

38. Section 4.8 of the Application and the prefiled testimony of Charles J. Natale, Jr. address the potential impacts of the Project on terrestrial wildlife and protected species.

39. There are no terrestrial state-listed protected species occurring in the vicinity of the New York Landfall. No federally-listed protected flora or fauna have been documented to occur in the vicinity of the Submarine Transmission Cable Route, with the sole exception of occasional transient bald eagles.

40. Impacts to terrestrial wildlife and protected species from installation, operation and maintenance of the Project will be low, as all of the upland portion of the Project in New York will be located in a developed urban setting. Any species that may inhabit the area are adapted to urban environments and are found abundantly in the area. Due to the limited potential for interaction between protected terrestrial wildlife and Project activities, it is anticipated that construction, operation and maintenance of the Project components will have negligible impact, if any, on these species. Urban wildlife species are expected to continue to utilize areas adjacent to the Project during construction, and likely will re-utilize the Upland Project Area once installation of the underground cable is complete. Furthermore, in the event that a transient bald eagle might pass through the region, the Project Area lacks suitable roosting areas to be attractive to eagles, and the species is mobile enough to avoid impact.

Marine Protected Species

41. Section 4.9 of the Application and the prefiled testimony ("Testimony") of Charles J. Natale, Jr. and Susan M. Herz address the potential impacts of the Project on marine protected species.

42. Four species of federally listed threatened or endangered sea turtles, several species of federally listed endangered marine mammals, and the federally listed endangered shortnose sturgeon have the potential to utilize the Project Area during certain times of year. In addition, the Atlantic sturgeon, which is a candidate species under the Federal Endangered Species Act, has the potential to

occur within the vicinity of the Project Area. Many of these species would only occur occasionally on a transient basis or would be extremely unlikely to occur in the Project Area.

43. Four species of federally and state-listed threatened or endangered sea turtles may be found seasonally in New York waters: the federally threatened loggerhead, federally endangered Kemp's ridley, federally endangered green sea turtle, and the federally endangered leatherback. None of these sea turtles nest in the New York Harbor Estuary, nor reside there year-round.

44. Several species of federally endangered marine mammals are known to occur seasonally off New York but only the North Atlantic right whale and humpback whale are likely to occur in shallow, nearshore waters. These whales are seldom sighted in the New York Harbor Complex. Therefore, only rare, transient individuals would be expected to occur in Upper New York Bay, Gowanus Bay or the Project Area.

45. Pursuant to the Testimony of Mr. Natale and Ms. Herz, construction and installation of the Submarine Transmission Cable is not expected to have adverse impacts to any of the federally- or state-listed threatened or endangered marine mammal or turtle species. If transient marine mammals or sea turtles are present during construction or installation of the Submarine Transmission Cable, they are mobile and can avoid the limited area of construction. In addition, since none of the sea turtles nest in the New York Harbor Estuary, and since none of the listed marine mammals or turtles reside there year-round, no direct or indirect impacts to nesting or breeding sites will occur, and the Project will have negligible impact, if any, on protected mammal or turtle species.

46. The Testimony of Mr. Natale and Ms. Herz further states that construction and installation of the Submarine Transmission Cable is also not anticipated to have adverse impacts to shortnose or Atlantic sturgeon. Important habitats (summer range, overwintering areas, spawning areas) for both the shortnose and Atlantic sturgeon are located outside of the Project Area -- a minimum of 27 miles north of the Project Area. In addition, eggs, larvae and early life stages of the shortnose or Atlantic sturgeon would not be present within the Project Area; therefore, these vulnerable life stages will not appear to be affected by Project activities. In the unlikely event that transient shortnose or Atlantic sturgeon adults are present during Submarine Transmission Cable installation, they are highly mobile and can avoid the temporary area of disturbance during construction. Due to the limited potential for interaction between shortnose or Atlantic sturgeon and Project activities, it is anticipated that construction, installation and maintenance of the Submarine Transmission Cable will have negligible impact, if any, on these protected fish species.

47. Operation of the Submarine Transmission Cable is not anticipated to have any adverse impacts to protected marine species. The Submarine Transmission Cable will be buried to a target depth of 15 feet below the present seabed.

Land Use

48. Section 4.10 of the Application and the prefiled testimony of Payson R. Whitney, III, and William Heeney address the potential impact of the Project on local land use.

49. The Submarine Transmission Cable landfall and upland component design is consistent with state and local coastal policies and consistency criteria, as confirmed by a March 31, 2009 letter from the New York State Department of State, Office of Coastal, Local Government and Community Sustainability, to Payson R. Whitney, III, of ESS Group, Inc. See Section 4.10.3 of the Application.

50. The transmission facility, as proposed, will be consistent with the New Waterfront Revitalization Plan and State Coastal Zone Management Plan.

51. The use of the landfall and Substation properties for the construction and operation of the Submarine and Upland Transmission Cables, and for the Electrical Interconnection, is within a designated Significant Maritime Industrial Area (SMIA) as defined in the New Waterfront Revitalization Plan and is consistent with the applicable provisions and designations of the New York City Zoning Resolution and Zoning Map.

52. The Project will be designed, operated, and maintained to limit impacts to the current and planned land uses within the vicinity. Impacts associated with construction activity are anticipated to be localized and temporary in nature, and will not conflict with existing and planned land uses within the Project vicinity.

53. Applicable New York City, State of New York, and other regulatory construction requirements will be adhered to during construction so as to avoid, minimize, and mitigate construction impacts. No long term land use impacts are anticipated due to construction activities associated with the Project. Because the Upland Transmission Cable will be buried within a below-grade trench on privately owned property inaccessible to the public, its location and operation will not conflict substantially with any existing development plans associated with this area, including the Draft Brooklyn Waterfront Greenway Plan.

Cultural and Historic Resources

54. Section 4.11 and the prefiled testimony of Lee Cox and Sarah K. Faldetta address the potential impacts of the Project on cultural and historic resources in the Project Area.

55. BEC's review of available information identified no recorded archaeological sites or historic architectural structures within or near the upland archaeological Area of Potential Effect ("APE"). No standing structures are located in the Project's upland APE. Based upon the degree of historic disturbance on this earthen-filled rip-rapped pier, and the multiple episodes of development and demolition that have occurred on the pier as documented by review of relevant Sanborn maps and historic aerial photographs, there is little potential for intact unrecorded archaeological deposits to be located at the New York Landfall. Therefore, the potential for impact to the upland APE from the Project is extremely limited.

56. BEC's research found no documented submerged archaeological sites within the 300-foot-wide survey corridor (the submerged APE) contained in the site files at the New Jersey or New York State Historic Preservation Offices. No publicly known shipwrecks are located within or adjacent to the submerged APE.

57. By letter dated May 13, 2008, the State Historic Preservation Office ("SHPO") at the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP") found that construction and operation of the Project at the New York Landfall would have no effect upon cultural resources in, or eligible for inclusion in, the National Register of Historic Places. By letter dated October 14, 2008, the SHPO at OPRHP found that the construction and operation of the Project would have no effect upon cultural resources in New York waters that are in, or eligible for inclusion in the National Register of Historic Places.

58. In New York waters, a total of seven submerged acoustic and magnetic remote sensing targets found within the Submarine Transmission Cable Route during BEC's two geophysical surveys were recommended for avoidance by the direct jet plow zone by BEC's marine archaeologist. The proposed Submarine Transmission Cable Route was adjusted in the area of these targets to avoid each target.

59. If, during construction, potential historic resources are identified and the direct plow zone cannot be routed to avoid these targets, then a diving inspection by a marine archaeologist of those

targets that would be physically disturbed by cable installation would be conducted to determine if they could be associated with historically significant submerged cultural resources. The Certificate Conditions attached as Appendix A adequately address the potential discovery of any archeological resources during construction.

Visual and Aesthetic Resources

60. Section 4.12 of the Application and the prefiled testimony of Sarah K. Faldetta address the potential impacts of the Project on visual and aesthetic resources.

61. During construction of the Upland and Submarine Transmission Cable System in New York, construction equipment will be visible on and around the existing developed waterfront area and along the Submarine Transmission Cable Route. This visibility of construction equipment and activities is primarily from waterfront areas. From the inland perspective, due to the physical screening between the site and the adjacent neighborhoods provided by intervening multi-story buildings and the elevated Gowanus Expressway to the north, east, south and southwest of the Landfall, along with mature vegetation along Brooklyn hillsides and the relatively low elevation of the Landfall site, the views of the temporary construction activities will not be as readily apparent as from the water.

62. Potential visual impacts of Project construction at those visual and aesthetic resources in the study area with open views of the New York Landfall and along the Submarine Transmission Cable Route in New York, such as the Red Hook Recreation Area, will be minimal, localized, and temporary. The types of temporary visual impacts will be consistent with those typically seen in this heavily industrialized waterfront and within urbanized areas surrounding Upper New York Bay. Once construction is complete, the Upland Transmission Cable will be located below ground except for approximately 20 to 25 feet of cable and accessory structures located at the point of interconnection within the Gowanus Substation. The Submarine Transmission Cable will not be visible from land. The Transition Vaults will be installed underground within the filled pier with a manhole cover at grade to allow access for maintenance purposes. Some aboveground improvements will be required within the limits of the Gowanus Substation to increase its capacity and reliability. Any visible components will be at heights similar to or lower than existing utility structures, and will be consistent with the present appearance of this aboveground electrical facility.

63. As described above, the State Historic Preservation Office at OPRHP has found the Project will have no effect on cultural resources. The Project components in New York will cause no permanent modifications to existing urban views or adverse visual impacts to visual and aesthetic resources within the study area. The Project will have no other impacts to visual and aesthetic resources.

Noise

64. Section 4.13 of the Application and the prefiled testimony of Howard Quin, Ph.D. address the potential noise-related impacts of the Project, as well as relevant New York City construction noise control regulations.

65. Two construction activities associated with the Project will generate noise at the New York Landfall: (1) Excavating the HDD pit and the upland cable trench from the HDD pit to the Gowanus Substation; and (2) HDD operations. Impacts related to noise generated during these operations in the area of the New York Landfall are expected to be negligible.

66. The sound from the excavation of the HDD pit and the cable trench will be typical of roadway construction work and will be minimized using low-noise equipment. Excavation activities will also comply with the limit of 85 dBA at 50 feet in Section 24-228 of the NYC Noise Code, excluding

impulsive sound, as evidenced by the noise emission reference levels in the appendix to Section 109 of the Citywide Construction Noise Mitigation rules, 15 RCNY § 28-100 *et seq.*

67. The predicted maximum sound levels (L_{\max}) at the HDD operations area were modeled based on conservative assumptions, and the model predicted sound levels at and beyond 50 feet from the HDD operations. The highest predicted L_{\max} level at 50 feet is 81 dBA, which complies with the 85 dBA limit (at 50 feet) in Section 24-228 of the NYC Noise Code. This highest predicted L_{\max} sound level is lower than the range of the estimated existing L_{\max} sound levels at the site, which is 82 to 89 dBA.

68. As no equipment operates continuously at maximum power, acoustic usage factors were used in calculations to convert peak sound levels to 1-hour energy-average (L_{eq}) sound levels. The highest predicted L_{eq} sound level at 50 feet is 72 dBA, which is within the range of estimated existing L_{eq} sound levels at the site, which is 65 to 80 dBA.

69. The HDD operations during construction will comply with the new NYC Noise Code and the Citywide Construction Noise Mitigation rules. Quieter models of construction equipment and noise barriers will be used where possible to minimize noise impacts on nearby receptors. A Construction Noise Mitigation Plan will be developed in conformance with the requirements of 15 RCNY § 28-100 and will be followed for the excavation and HDD phases of construction for the Project.

Public Health

70. Section 4.14 of the Application and the prefiled testimony of Peter A. Valberg, Ph.D. address the potential impacts of the electromagnetic fields ("EMF") associated with the operation of the BEC Transmission Cable System.

71. Predicted EMF impacts from the Transmission Cable System will:

- Be well below human health-based standards and are not expected to have negative ecological impacts along the Submarine Transmission Cable Route;
- Produce EMF strengths well below the relevant NYSPSC Interim EMF Policy (as defined below) at the boundaries of the Upland Transmission Cable Route;
- Not interfere with existing communications infrastructure.

72. The Project's EMF strengths were modeled at various locations under various scenarios using information on the design of the Transmission Cable System, such as line voltage, current, conductor diameter, transmission line configuration, and other parameters. The predictive model calculated predictive EMF values based on the proposed Transmission Cable System. The predictive model assures compliance with the Commission's *Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities* (NYSPSC, September 11, 1990) (the NYSPSC Interim EMF Policy).

73. The computer model predicts that electric fields will not be produced by either the Submarine or Upland Transmission Cables. In the seabed, the shielding around the Submarine Transmission Cable and the surrounding water will screen the electric field produced by the cable. On land, the soil surrounding the Upland Transmission Cable will screen the electric field that might be produced by the cable.

74. The predicted magnetic field levels at all locations analyzed fall well below guidelines established by the NYSPSC Interim EMF Policy for acceptable public exposure to EMF. The maximum predicted magnetic field at the seafloor is 439 milligauss ("mG"), which is well below the human health-based standard of 833 mG. At the water surface, the maximum predicted magnetic field will range from

55 to 170 mG. The Upland Cable will produce magnetic fields of 2 mG at the edges of the rights-of-way ("ROWS"). Both of the predicted magnetic field levels are well below the NYSPSC Interim EMF Policy standard of 200 mG at ROW edges.

75. BEC will submit, with the EM&CP, a certification by a New York licensed professional engineer that the Transmission Cable System will comply with the NYSPSC Interim EMF Policy, if it is constructed in accordance with final design plans.

Air Quality

76. The BEC Project's potential impacts to air quality are discussed above in section C.

77. The Bayonne Energy Center will operate under applicable air emissions regulations as incorporated in the facility's Air Pollution Control Operating Permit issued by the New Jersey Department of Environmental Protection under Title V of the federal Clean Air Act and regulations of the State of New Jersey.

78. In NYISO's Day-Ahead Market, generation facilities are called into operation in order of their cost of service, in dollars per megawatt-hour as bid in the Day-Ahead Market. Units with the lowest operating cost (typically, units with low fuel costs and/or high efficiency) will be called into operation for a higher percentage of the day, and units with higher operating costs will typically be called into operation only after all other units with lower operating costs have been dispatched. As a result, electric generators with higher operating costs operate a small percentage of the time, and may only be called into operation during High Energy Demand Days. Such HEDD units are typically peaking generators with low energy efficiency resulting in higher fuel use and higher emissions. These HEDD units do not typically incorporate modern emission control technologies because of the age of the units, or because they operate so few hours per year as to be exempt from requirements for such controls under current emissions regulations.

79. The BEC Project and the Transmission Facility will provide efficiency benefits to New York. For gas-fired generators, the most efficient generators, which emit lower quantities of air pollutants per megawatt-hour, are called into service before less efficient gas-fired generators, which typically emit more air pollution per megawatt-hour. Newer gas-fired generation facilities such as BEC incorporating modern emission control technologies and more efficient heat rates produce lower overall emissions per megawatt-hour than older generation facilities. As a result, the BEC generating facility with its lower operating cost and lower emissions will be called into service before older less-efficient gas-fired generators. The net effect is that generation capacity offered through the Transmission Facility, as it is added to the generation mix in New York, will displace older, less efficient generator units, resulting in improvements in overall air quality.

80. The NYCEDC Plan, discussed above, recommends the pursuit of clean, efficient in-City generation capability. NYCEDC Plan § 1.4.1, p. 22. The NYCEDC Plan states that "adding clean, efficient generation to NYC will displace older, less-efficient sources of energy, reducing emissions." NYCEDC Plan § 1.4.2, p. 28. Because the Transmission Facility will serve as a dedicated generator lead connected directly to the Gowanus Substation, unaffected by existing constraints on transmission into the City, the BEC Project is considered in-City generation.

81. DPS Staff requested that BEC provide a Dispatch and Environmental Analysis ("Analysis") of the proposed BEC Project. Levitan & Associates, Inc. ("LAI") performed the Analysis for the BEC Project.

82. Once the Dispatch Analysis was completed, the Environmental Analysis compared the 2012 air emissions of the power plants in Zone J, in the entire New York Control Area ("NYCA"), and in

NYCA plus PJME with and without the addition of the BEC Project. LAI estimated power plant emissions for nitrogen oxides ("NOx"), sulfur dioxide ("SO2"), and carbon dioxide ("CO2").

83. The Analysis predicts that the BEC Project will be dispatched before older and more expensive gas turbines in Zone J, many of which have NOx emission rates that are ten times and up to 100 times greater than the Project's.

84. The Analysis also predicts that BEC will provide valuable energy reserves to NYISO when not operating, thus avoiding the need for NYISO to operate higher-emitting Zone J load-following boilers at minimum or part load. LAI estimates operation of load-following boilers, many of which are oil-fired, would be reduced by about 12% during on-peak hours and by about 21% during off-peak hours.

85. As a result, it is anticipated that the BEC Project will materially lower power plant air emissions in Zone J. In particular, for the Analysis' study year 2012 average emission reductions for the two study cases are as follows:

- NOx declines by 349 tons (12%);
- SO2 declines by 104 tons (25%); and
- CO2 declines by 407,000 tons (5%).

86. In addition to the Zone J air impacts, LAI estimates that Bayonne will lower power plant NOx emissions across NYCA and PJME.

Alternatives

87. The record demonstrates that, after a consideration of potential alternatives, the preferred Submarine Transmission Cable Route, the selected New York Landfall, the selected Transmission Cable technology, and the selected installation techniques are best suited to the facility.

Submarine Cable Route

88. The siting of the Submarine Transmission Cable Route was developed through evaluations of alternative landfall locations and routes, as well as through consultations with the Harbor Safety, Operations, and Navigation Committee of New York and New Jersey; the U.S. Army Corps of Engineers ("USACE"); and the U.S. Coast Guard ("USCG"). BEC evaluated four alternative in-water routes and one hypothetical upland route.

89. The following criteria were used in the selection of the Submarine Transmission Cable Route:

- Minimize overall cable length in order to minimize electrical losses, environmental impacts and costs;
- Reduce navigational impacts to waterborne commerce by minimizing installation activities and time in heavily utilized ship transit corridors, designated navigation channels, and known or designated vessel anchorage, mooring, or berthing areas;
- Minimize the crossing impacts associated with established vessel anchorages, mooring areas, and existing submarine infrastructure such as cables, pipelines, etc.;

- Avoid or minimize environmental impacts to water quality and aquatic resources, and avoid or minimize potential impacts to known submerged historical resources;
- Locate and determine the most feasible subsurface geological conditions conducive to burial of the Submarine Transmission Cable by jet plow embedment to minimize potential water quality and aquatic resource impacts and to minimize potential mechanical damage to the cable system;
- Utilize existing utility and interconnection infrastructure where possible to minimize the use of undisturbed areas for these purposes;
- Avoid or minimize work in public roadways to minimize traffic and neighborhood disruptions during construction;
- Avoid routing the cable through areas of very high tidal current velocities;
- Avoid/minimize impacts to sensitive aquatic resource habitat areas such as those utilized by protected species and sensitive Essential Fish Habitat where possible.

90. The selected preferred Submarine Transmission Cable Route as presented in the Application for Certification was determined to be the best suited for the Project, as it meets the above criteria to a greater degree than any of the four alternative in-water routes considered. The hypothetical “entirely” upland route from Bayonne to Brooklyn (Gowanus) described in the Application was determined to be infeasible due to cost, routing complexity, private property access and acquisition and construction access.

New York Landfall Location

91. Multiple landfall locations were identified and evaluated to determine the best alternative for bringing the Submarine Transmission Cable ashore. The objective of the evaluation was to determine a landfall location that met the following criteria:

- Capacity of existing substations to accept additional electrical interconnections or the ability to add additional capacity;
- Proximity to preferred substations in order to minimize overall cable length, as well as electrical losses, environmental impacts, neighborhood disruption, and costs;
- Avoid or minimize location of transmission cables in public rights-of-way;
- Sufficient available space for landfall transition operations and equipment;
- Construction accessibility;
- Avoid or minimize the potential for interference with shipping traffic;
- Sufficient available land area for HDD operations as well as for establishing a permanent transition vault;
- Minimize construction risks of drilling under existing structures, or of using drill routes with tight radii (i.e., the route should be as straight as possible); and

- Minimize or avoid disruption to public amenities in the area, surrounding land uses, traffic and community activities.

92. Based upon evaluation of the New York landfall alternatives and extensive consultation with relevant agencies, the most feasible New York landfall is located at the existing 25th Street Pier. This location meets the above criteria to a greater degree than any of the alternative landfall locations considered.

Transmission Cable Technology

93. BEC assessed several alternative cable technologies. As a result, single-core cross-linked polyethylene ("XLPE") insulated solid dielectric cable was selected as the preferred electric transmission cable technology for the following reasons. The selected supplier of the Submarine Transmission Cable has the capability to manufacture each of the three single-phase cables in a continuous extrusion process and consequently offers guarantees to deliver the submarine cable system free of factory and field splices. The cable design does not require insulating or dielectric cooling fluids to maintain optimum transmission capacity, and thus avoids the environmental impacts of spillage or sheen in marine waters. Therefore, the selected cable technology is best suited to the Project as it is the most feasible technology that meets the Project's design and operational parameters.

94. Construction of this 345 kV three-phase cable circuit requires three single-phase submarine cables to be installed with appropriate physical separation to allow for heat dissipation to be matched to the heat resistivity characteristics of the surrounding sediment, including the thermal resistivity characteristics of each landfall area. Therefore, the three phase cables must be installed in three separate trenches with a minimum horizontal separation of 33 feet to meet the Project's requirement that the Cable System be rated at 602 megavolt-amperes ("MVA") at a 0.9 load factor to deliver 512 MW of AC power to the Electrical Interconnection.

Installation Techniques

95. BEC reviewed alternative technologies for mechanical installation of the Transmission Cable in Upper New York and Gowanus Bays. The hydraulic jet plow embedment technology is the best suited technology for the BEC Project for the following reasons: its ability, as demonstrated during recent submarine cable installations in New York area waters, to achieve the desired burial depth; its minimal environmental impacts to sensitive aquatic resources and water quality; and its avoidance of the need to remove and handle sediments along the route.

Findings

96. The nature of the probable environmental impact of the Transmission Facility will be localized and temporary in that it will use low-impact installation technologies (jet-plow embedment, HDD, etc.) and will be constructed in a narrow corridor along the seabed of New York's Upper Bay and Gowanus Bay. No significant impacts are expected to result from cable system construction or operation with regard to the physical or chemical properties of existing surface and near-surface marine sediments, resultant suspended sediment effects, and water quality. Any changes in turbidity are expected to be localized and temporary (and subject to a suspended solids monitoring provision set forth below). Impacts on finfish and commercial shellfish during construction are expected to be minimal. No impact on aquatic resources is expected as a result of the cable's operation. No significant impacts on visual or cultural resources will result from any of the structures or equipment associated with the proposed Transmission Facility. All of the construction methods for this Project will be contained in the EM&CP and will be designed to minimize impacts on the physical and human environment.

97. The Transmission Facility will deliver 512 MW of dedicated power generation to NYISO Zone J, with air permit emissions limitations that already satisfy or exceed HEDD and NOx RACT regulations and proposals in New York and New Jersey. The operation of the BEC Project and the Transmission Facility is expected to reduce emissions per megawatt hour as a consequence of the Project's displacement of older, dirtier generation units, because the BEC Project will operate more efficiently while employing state-of-the-art emissions controls.

98. No right-of-way exists that could be expanded to accommodate the Project's proposed Transmission Cable Route.

99. The Transmission Facility, as proposed, represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations such as the effects on agricultural lands, wetlands, parklands and river corridors because the installation of the cable in compliance with the proposed Certificate Conditions is expected to produce only localized and temporary impacts.

E. Underground Location

In compliance with PSL § 126(d)(1), the record demonstrates, and supports the Commission's finding and determination of, what portions of BEC's Transmission Cable will be located underground. The Transmission Facility should be located underground except for structures and a short section of cable within the Gowanus Substation site.

1. The record demonstrates that, except for approximately 20 to 25 feet of the upland cable on the Gowanus Substation property, the Transmission Facility is designed for underground installation, and that no party has challenged BEC's proposal to place the Transmission Facility underground. In New York State, 2.45 miles of the Submarine Transmission Cable will be buried at a depth consistent with the requirements of the Certificate Holder's U.S. Army Corps of Engineers permit along the proposed route detailed in the Application.

2. The New York Landfall portion of the Submarine Transmission Cable, approximately 720 feet in length, will be installed in HDD Conduits beneath the 25th Street Pier in Brooklyn, New York. The HDD Conduits will terminate at three Transition Vaults to be located on the Gowanus Substation property. From the Transition Vaults an approximately 720 foot long section of the Upland Transmission Cable will be buried within the Gowanus Substation property in a duct bank approximately 3.5 feet below grade, to a point approximately 20 to 25 feet from the Electrical Interconnection. From that point, the Upland Transmission Cable will be located above ground to the Electrical Interconnection in the Gowanus Substation.

F. Conformance to Long-Range Plans

The Transmission Facility conforms to a long-range plan for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, which will serve the interests of electric system economy and reliability, in compliance with PSL § 126(1)(d)(2), and will serve the public interest, convenience and necessity, in compliance with PSL § 126(1)(g).

1. NYISO has implemented a Comprehensive Reliability Planning Process to ensure the continued reliability of the electric grid. As part of that process, NYISO issued its 2009 Reliability Needs Assessment ("NYISO 2009 RNA") in January 2009 and its 2009 Comprehensive Reliability Plan ("NYISO 2009 CRP") in May 2009. Such assessments and plans, provided to the public, encourage competitive markets for both wholesale and retail supplies.

2. The BEC Project and the Transmission Facility will provide system reliability enhancements via upgrades to the Gowanus Substation, black start capability during major power outages, and a submarine transmission cable providing transmission system delivery diversity.

3. The BEC Project and the Transmission Facility provide the flexible supply reliability for Zone J that anticipates and helps meet the goals of environmental programs for wind generation, new programs to control NOx emissions, and programs for Regional Greenhouse Gas Initiative initiatives. Furthermore, BEC provides security for any unexpected retirements of generation plants and demand reductions below 2009 RNA projections. The Project's black start capability will allow the generating facility to go from a shutdown condition to an operating condition, and start delivering power without assistance from the power system.

4. The BEC Project and the Transmission Facility also provide cost and reliability savings attributable to BEC's ability to be on-line the fourth quarter of 2011, should other market-based projects, new transmission projects, or other upgrades not be accomplished by then, or should wind generation not be available in a load-following manner, or should generator retirements occur as a result of re-licensing disapproval or the costs of planned environmental requirements.

5. Based on an analysis of need within the Zone J market, BEC proposes the 345 kV Transmission Facility, uniquely supporting a dedicated electric generating project that will interconnect into NYISO Zone J and operate as a dedicated intermediate resource providing reliability enhancements to the 2009 CRP's forecasted requirements. The Transmission Facility and the BEC Project not only provide transmission for new, low-emission generation, but also provide timely support against reliability sensitivities and scenarios that could adversely affect the implementation of the reliability plan and future system reliability.

6. The New York City Economic Development Corporation ("NYCEDC") recently commissioned a study, performed by CRA International, to develop a master electrical transmission plan for New York City. The result, A Master Electrical Transmission Plan for New York City ("NYCEDC Plan"), was finalized May 28, 2009. The NYCEDC Plan analyzes the economic and environmental impacts of various proposed and conceptual transmission and generation projects that could improve power supply to the City, and provides recommendations for further action to meet the City's energy needs in an efficient and clean manner. The NYCEDC Plan is primarily an economic evaluation of transmission options to serve the City's energy needs, though it did include three generation options as points of comparison. One of the generation options is similar to the BEC Project: "A 500 MW simple cycle gas turbine (SCGT) plant connected to the Gowanus substation." NYCEDC Plan, § 1.2, p. 12. However, the BEC Project is distinct from the SCGT hypothesized by the NYCEDC Plan, as the BEC Project will operate at higher capacity factors, more efficiently, and at a higher rate of return. Further, the risks and costs of the BEC Project will be borne by a private developer, a public benefit not considered by the NYCEDC Plan. Because the Transmission Facility will serve as a dedicated generator lead connected directly to the Gowanus Substation, unaffected by existing constraints on transmission into the City, the BEC Project is considered in-City generation.

7. Among the key findings of the NYCEDC Plan is that from the City's perspective, the most attractive options under the NYCEDC Plan's reference case assumptions include in-City generation. The NYCEDC Plan found that "the development of a transmission or generation project before the point at which such a project would be needed to satisfy reliability criteria would result in increased benefits for City consumers." NYCEDC Plan § 1.4, p. 22.

8. The NYCEDC Plan recommends the pursuit of clean, efficient in-City generation capability, as such capability would provide substantial economic benefits to City and State consumers. NYCEDC Plan § 1.4.1, p. 22. The NYCEDC Plan also states that "adding clean, efficient generation to NYC will displace older, less-efficient sources of energy, reducing emissions." NYCEDC Plan § 1.4.2, p. 28.

9. The BEC Project will provide the reliability, cost, and environmental benefits identified by the NYCEDC Plan.

10. The Transmission Facility will serve the public interest, convenience and necessity because it will, with minimum environmental impact, provide needed electricity in New York's Zone J, enhance fuel diversity, improve system reliability, enhance opportunities for market-based transactions, and through the opportunity to displace existing older and dirtier generation sources, provide environmental benefits.

G. State and Local Laws

The location of the Transmission Facility, as proposed, conforms to applicable State and local laws and regulations in compliance with PSL § 126(f). If during the design and construction of the Project, BEC identifies a state or local ordinance, law, regulation, or other action requiring an approval, consent, permit, certificate or other condition that BEC believes is unreasonably restrictive as applied to the BEC Project or the Transmission Facility, BEC may, with notice to the Active Parties List and the affected state or local authority, apply to the Commission for relief from such requirement pursuant to PSL § 130.

1. The record establishes that the Transmission Facility will be in compliance with the New York City Zoning Resolution. The New York Upland Cable Route is located within an M3-1 Heavy Manufacturing District. M3-1 Heavy Manufacturing Districts permit heavy manufacturing uses as-of-right. Heavy manufacturing uses include electric utility substations, with no limitation as to size. The Gowanus Substation is permitted as-of-right as an electric utility substation. The BEC Project's Upland Cable will be an accessory structure to the Gowanus Substation, and will therefore constitute a permitted as-of-right use. See NYC Zoning Resolution §§ 12-10 (Definition of "Accessory use, or accessory"), 42-14(C) ("Use Group 17, Miscellaneous Uses"). The BEC Project will comply with applicable bulk regulations under the New York City Zoning Resolution, as discussed in the Application. The BEC Project will also comply with relevant height, waterfront zoning, parking, and performance regulations of the Zoning Resolution.

2. The BEC Project will comply with the substantive requirements of the New York City Administrative Code, including applicable noise mitigation and construction regulations.

3. The BEC Project will comply with New York City Rules and Regulations, including requirements of the Department of Buildings, the Department of Business Services, and the Department of Environmental Protection.

4. The BEC Project will comply with the New York City Charter. BEC will obtain the necessary rights for construction, operation, and maintenance of the landfall portion of the Submarine Transmission Cable and associated HDD Conduits and other structures, as may be required by the City of New York. The BEC Project will comply with all substantive requirements relevant to waterfront property that are imposed by the Department of Business Services.

5. BEC will, within five (5) business days of the date of commercial operation of the Transmission Facility, as commercial operation is defined in the BEC Project's Construction Financing Credit Agreement, contribute to the Economic Development Corporation of the City of New York \$1,500,000, to pay for energy-related economic development projects in support of PlaNYC. NYCEDC will identify the projects that will be eligible to use the funds and NYCEDC will administer the funds.

6. The Project's design and construction will conform to the New York State Building and Fire Prevention Code, as well as the National Fire Protection Association Standards, the Electric Safety Code and applicable ANSI standards.

7. The location of the Transmission Facility conforms to applicable state and local laws and regulations. The upland portion of the Transmission Facility will be buried and connected to the Gowanus Substation in conformance with NYISO and Con Edison safety and construction requirements.

H. Certificate Conditions

The Signatory Parties agree that the proposed ordering clauses/certificate conditions set forth in Appendix A attached hereto are acceptable and appropriate for inclusion in a Certificate authorizing construction and operation of the proposed Facility as configured herein.

I. Water Quality Certification

Based upon the record, and the related findings above, the Signatory Parties agree that the Commission should issue a Water Quality Certification with respect to the Transmission Facility in the form attached hereto as Appendix B.

IN WITNESS WHEREOF, the Signatory Parties have this day signed and executed this Joint Proposal.

STAFF OF THE NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

By: David Drexler, with the exception
of paragraph G.5,
contained on page 29
of the Joint Proposal,
to which the Department
of Public Service does
not take a position.

Name: David Drexler
Title: Assistant Counsel
Date: October 5, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____

Name:
Title:
Date:

BAYONNE ENERGY CENTER, LLC

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:
Title:
Date:

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:
Title:
Date:

IN WITNESS WHEREOF, the Signatory Parties have this day signed and executed this Joint Proposal.

STAFF OF THE NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

By: _____

Name:

Title:

Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: Patricia J. Desnoyers

Name:

Title:

Date:

Patricia J. Desnoyers
Senior Attorney
October 5, 2009

BAYONNE ENERGY CENTER, LLC

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:

Title:

Date:

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:

Title:

Date:

IN WITNESS WHEREOF, the Signatory Parties have this day signed and executed this Joint Proposal.

STAFF OF THE NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

By: _____

Name:

Title:

Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____

Name:

Title:

Date:

BAYONNE ENERGY CENTER, LLC

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: John Schultz

Name: John Schultz

Title:

Date: October 2, 2009

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:

Title:

Date:

IN WITNESS WHEREOF, the Signatory Parties have this day signed and executed this Joint Proposal.

STAFF OF THE NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

By: _____

Name:
Title:
Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____

Name:
Title:
Date:


BAYONNE ENERGY CENTER, LLC

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: _____

Name:
Title:
Date:

By: Member, Executive Committee,
Bayonne Energy Center, LLC

By: X  _____

Name: Daniel R. Revers
Title:
Date: Oct. 5, 2009

NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

By: James T. Gallagher 110

Name: JAMES T. GALLAGHER
Title: SENIOR VICE PRESIDENT - ENERGY POLICY
Date: 10/5/09

CITY OF NEW YORK

By: _____

Name:
Title:
Date:

NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

By: _____

Name:

Title:

Date:

CITY OF NEW YORK

By: William S. Plache

Name: William Plache
Title: Assistant Corporation Counsel
Date: 10/5/09

Appendix A

[Certificate Conditions]

Appendix A

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 08-T-1245: Application of Bayonne Energy Center, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law.

PROPOSED CERTIFICATE CONDITIONS

The Commission orders:

1. Subject to the conditions set forth in this Opinion and Order, Bayonne Energy Center, LLC ("Certificate Holder") is granted a Certificate of Environmental Compatibility and Public Need authorizing the construction, operation, and maintenance of the New York State portion of a 6.6-mile, 345 kilovolt ("kV") alternating current ("AC"), 3 phase circuit submarine electric transmission facility and associated upland cable and interconnection equipment (collectively the "Transmission Facility"), which shall connect a new 512 megawatt ("MW") generating facility to be located in Bayonne, New Jersey, to the New York Independent System Operator ("NYISO") electrical grid at the Consolidated Edison Company of New York, Inc. ("Con Edison") substation in Brooklyn, New York ("Gowanus Substation"). The conditions set forth in this Opinion and Order shall apply to the portions of the Transmission Facility certified to be built within the State of New York.
2. The Certificate Holder shall, within 30 days after the issuance of the Certificate, submit to the Public Service Commission ("Commission") either a petition for rehearing or a verified statement that it accepts and shall comply with the Certificate and the conditions placed upon the Certificate. Failure to comply with this condition shall invalidate the Certificate.
3. The Certificate Holder shall not commence site preparation and construction of the Transmission Facility prior to receiving all necessary permits, certifications, and approvals required for the Project, including but not limited to, those issued from the State of New Jersey for the New Jersey portion of the Transmission Link and the new 512 megawatt multi-unit simple-cycle natural gas-fired (with ultra low sulfur diesel oil as a backup fuel) generating facility to be located

in Bayonne, New Jersey, a work permit from the New York State Office of General Services for use of state-owned lands under water, and the Department of the Army Permit required for construction in navigable waters of the United States. The Certificate Holder shall provide copies of said permits, certifications, and approvals to the Commission within 15 days of receipt.

4. Construction of the project on the property of Con Edison shall not begin until the Certificate Holder has received the necessary easements, access agreements or consents from Con Edison to permit such construction.
5. The Certificate is issued with the understanding that no property within New York State will be required to be obtained through eminent domain, and in the event an eminent domain proceeding is initiated in relation to the Transmission Facility the Certificate shall be deemed invalid.
6. The Certificate is issued on the basis that the Transmission Facility is to be developed, financed, constructed and operated on an entrepreneurial basis with no reliance on cost-of-service rates set for the Certificate Holder by either a Federal or State regulatory entity, and will not be included in utility rate base, either directly or indirectly through a contractual arrangement with a regulated utility. In the event the Certificate Holder seeks to recover any of the costs of the Transmission Facility in cost-of-service rates set by a Federal or State regulatory entity, or to include the facility in utility rate base, the Certificate shall be deemed invalid.

Laws and Regulations

7. Each substantive federal, state and local law, regulation, code and ordinance (including the New York City Zoning Resolution) applicable to the location of the Transmission Facility authorized by the Certificate shall apply.
8. No state or local legal provision purporting to require any approval, consent, permit, certificate or other condition for the construction or operation of the Transmission Facility authorized by the Certificate shall apply, except (i) those of the Public Service Law and regulations and orders adopted thereunder, (ii) those provided by otherwise applicable State law for the protection of

employees engaged in the construction and operation of the facilities, (iii) those permits issued under a federally delegated environmental permitting program, and (iv) those referenced in Conditions 9, 13, 20, and 23 below.

9. Subject to the Commission's ongoing jurisdiction, the Certificate holder shall be permitted to seek the following New York City ("City") regulatory permits and approvals that would be applicable to the construction work for or operation of the Transmission Facility in the absence of PSL § 130:
(a) Building permits, (b) permits for structural welding, (c) permits under the New York City Fire Code, (d) permits for the discharge of wastewater or stormwater to the sewer system, (e) permits for the use and supply of water. A copy of each permit or approval received from the City shall be provided to DPS Staff by the Certificate Holder within 15 days after the Certificate Holder's receipt of such permit or approval.
10. If the Certificate Holder believes that any action taken, or determination made, by the City in furtherance of the City's review of the permits and approvals referenced in Conditions 9, 13, 20, and 23, is unreasonable or unreasonably delayed, the Certificate Holder may petition the Commission, upon reasonable notice to the City, to seek a resolution of any such unreasonable requirement or unreasonable delay. The City may respond to the petition, within three business days, to address the reasonableness of any requirement or delay.
11. The Certificate Holder shall comply with all federally-issued permits and approvals, including, but not limited to, permits issued by the Army Corps of Engineers.

Public Health and Safety

12. The Certificate Holder shall design, engineer and construct the Transmission Facility such that its operation shall comply with the interim electromagnetic field ("EMF") standards established by the Commission in Opinion No. 78-13 (issued on June 19, 1978) and the *Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facility* (issued September 11, 1990).
13. Upland construction work outside the walls of buildings whose exterior walls and roof are substantially complete shall take place between 7:00 a.m. and 6:00 p.m. as required by Section

24-222 of the New York City Administrative Code. For certain construction phases and activities, additional work hours may be necessary. Nothing herein shall preclude the Certificate Holder from making necessary arrangements for the extension of works hours with appropriate authorities of the City of New York. Noise mitigation procedures shall follow those set forth in the approved Environmental Management and Construction Plan ("EM&CP"). DPS Staff shall be notified at least 24 hours in advance if planned weekend, evening, or holiday upland construction becomes necessary. This condition is not intended to prohibit nighttime construction reasonably necessary to comply with restrictions on daytime construction on or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started.

14. Deliveries related to construction shall take place between 7:00 a.m. and 6:00 p.m., except that, to the extent required to accommodate oversized delivery pursuant to a New York City Department of Transportation ("NYCDOT") permit, the Transmission Facility shall be exempt from restrictions limiting delivery to 7:00 a.m. to 6:00 p.m. This condition is not intended to prohibit nighttime deliveries reasonably necessary to facilitate compliance with restrictions on daytime construction on or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started.
15. The Certificate Holder shall keep local fire department and emergency management teams apprised of chemicals and waste on site during construction and operation.
16. The Certificate Holder shall take appropriate measures as outlined in the EM&CP to minimize fugitive dust and airborne debris from construction activity.
17. The Certificate Holder shall take appropriate measures as outlined in the EM&CP to prevent and respond to spills of fuels and other contaminants.
18. The Certificate Holder shall instruct its contractors to park in designated areas that do not interfere with normal traffic, cause any safety hazard, or interfere with existing land uses.

19. The Certificate Holder or its appropriate contractor shall periodically consult with NYCDOT regarding traffic conditions near the project site, and shall make good faith efforts to minimize the impact of the construction of the Transmission Facility on traffic circulation in the area.
20. To the extent required in connection with the delivery of oversized Transmission Facility components, the Certificate Holder or its suppliers shall obtain any necessary permits from NYCDOT.
21. The Certificate Holder shall engineer and construct its facilities to be fully compatible with the operation and maintenance of nearby electric, gas, telecommunication, water, sewer, and related facilities; details of such other facilities and measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP.
22. The Certificate Holder shall coordinate maintenance of its facilities with those of any adjacent utility facilities.
23. The Certificate Holder shall comply with the requirement for the protection of underground facilities set forth in 16 NYCRR Part 753.
24. The Certificate Holder shall coordinate and schedule construction and maintenance activities to avoid or minimize, to the extent practicable, impacts to navigation and use of port facilities.
25. Within one year after the in-service date of the Transmission Facility, the Certificate Holder shall provide DPS Staff with as-built drawings of the Transmission Facility, a map showing the location of the Transmission Facility, and a list of coordinates identifying the submarine cable location and achieved burial depths.

Environmental Management and Construction Plan

26. The Certificate Holder shall not begin site preparation or construction with respect to any portion of the Transmission Facility (except for surveying, boring, and such other related activities necessary to prepare final design plans) before it has submitted to the Commission, and the parties identified in Condition 31, below, and the Commission has approved, an EM&CP for the relevant portion of the Project.

27. The filing and review of the EM&CP may be segmented in order to facilitate construction sequencing and scheduling, including the commencement of construction of on-land components of the Transmission Facility, provided that, with its first EM&CP filing, the Certificate Holder identifies the EM&CP segments. The Certificate Holder shall comply with any conditions contained in the Water Quality Certification issued pursuant to Section 401 of the Federal Clean Water Act.
28. The environmental protection measures contained in the § 401 Water Quality Certification, in the Joint Proposal (to the extent not superseded by this Certificate), and the Application (to the extent not superseded by this Certificate) shall be incorporated into the EM&CP and applied during construction, operation, and maintenance of the certified Transmission Facility. Applicable provisions of the EM&CP and orders approving the EM&CP shall be included in contracts associated with the design and construction of the Transmission Facility.
29. Deviation from the certified Transmission Cable Route, to the minimum extent necessary, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a specific provision of the Joint Proposal (to the extent not superseded in this Certificate) or this Certificate would be created.
30. Deviation from the design depth, height, and location of structures, to the minimum extent necessary, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a specific provision of the Joint Proposal (to the extent not superseded in this Certificate) or this Certificate would be created.
31. The Certificate Holder shall: submit five copies of the EM&CP to the Commission; serve three copies on the Staff of the New York State Department of Environmental Conservation ("NYSDEC"), one copy on the Region 2 office of the NYSDEC, and at least one copy on any other New York State agency (and its relevant regional offices) which requests the document; serve one copy on active parties on the service list who request the document; and place copies for inspection by the public in at least one public library or other convenient location in each municipality in New York State in which construction will take place. Contemporaneously with

the submission and service of the EM&CP, the Certificate Holder shall provide notice, in the manner specified below, that the EM&CP has been filed.

32. The Certificate Holder shall serve written notices of the filing of the EM&CP on all active parties to this proceeding, on each person on the Commission's service list considered potentially affected by the subject matter in the EM&CP, and on all statutory parties to this proceeding, and shall attach a copy of the notice to each copy of the EM&CP. Further, the Certificate Holder shall publish the notice in a newspaper or newspapers of general circulation in the vicinity of the Transmission Facility.
33. The written notice and the newspaper notice shall contain, at a minimum, the following: a statement that the EM&CP has been filed; a general description of the Transmission Facility and the EM&CP; a listing of the locations where the EM&CP is available for public inspection; a statement that any person desiring additional information about a specific geographical location or specific subject may request it from the Certificate Holder; the name, address, and telephone numbers of the Certificate Holder's representative; the address of the Commission, and a statement that any person may comment on the EM&CP by filing written comments with the Commission and the Certificate Holder within 30 days of the filing date with the Commission of the EM&CP (or within 30 days of the date of the newspaper notice, whichever is later). A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice shall be submitted to the Commission at the time the EM&CP is filed and shall be a condition precedent to approval of the EM&CP.
34. The Certificate Holder shall report any proposed changes in the approved EM&CP to DPS Staff, NYSDEC Staff, and to the Independent Inspector (as defined below). DPS Staff will refer to the Secretary of the Commission (or a designee) reports of any proposed changes that do not cause substantial change in environmental impact or are not related to issues decided during the proceeding. DPS will refer all other proposed changes in the EM&CP to the Commission for approval. Upon being advised that DPS will refer a proposed change to the Commission, the Certificate Holder shall notify all affected statutory parties, active parties that have requested

(before the approval of the EM&CP) to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice shall describe the original conditions and the requested change and state that documents supporting the request are available for inspection at specified locations, and state that persons may comment by writing or calling (followed by written confirmation) the Commission within 15 days of the notification date. Any delay in receipt of written confirmation shall not delay Commission action on the proposed change. The Certificate Holder shall not execute any proposed change until it receives oral or written approval from the Commission or its designee, except in emergency situations threatening personal injury, property damage or severe adverse environmental impact or as specified in the EM&CP.

35. The Certificate Holder shall provide, as part of the EM&CP, a final design plan that reflects the Transmission Facility's conformance with the Certificate, applicable federal, state, and local requirements (including, but not limited to, applicable regulations of the Occupational Safety and Health Administration, Uniform New York State Fire Prevention and Building Code, the New York City Building Code, the Rules of the City of New York, and chemical and waste-storage use and handling regulations), and a discussion of the status of the Certificate Holder's efforts to obtain permits necessary for project construction from the City of New York, the United States, and agencies in New Jersey, and a discussion of the status of the Interconnection Agreement for the certified facilities.

36. The Certificate Holder shall also address at least the following information in the EM&CP:

- a. details of work site dimensions, construction rights-of-way, and measures to protect adjacent facilities, structures, invasive species control measures during construction, and vegetation;
- b. a work plan for horizontal directional drilling and hydraulic jacking activities including an identification of pit locations, stabilization and dewatering practices, and nuisance control;
- c. jet plowing techniques and adjustments;

- d. details of cable pulling and splicing plans;
- e. designated parking areas and equipment storage and staging locations;
- f. details of erosion control plans, including grading and filling at the Gowanus substation;
- g. spoil control plans for excavations;
- h. fuel and fluids spill prevention and control plans;
- i. hazardous materials handling and disposal;
- j. public road traffic control and public safety;
- k. fencing around open work areas and provisions for through traffic, and alternative access;
- l. plans and specifications for pavement restoration;
- m. nighttime construction provisions, including lighting and noise control, and including conditions when nighttime construction will be undertaken;
- n. underwater construction and vessel spill containment and control plans;
- o. site restoration plans;
- p. detailed construction schedule and coordination plans, including construction calendar;
- q. dredging plans, silt control measures to be used during dredging and dredged materials management plans and proof of disposal;
- r. drawing showing the location of the HDD borehole in relationship to the Brooklyn shoreline;
- s. location of the utility crossings, and method of protecting the cable at those crossings;
- t. provision for submission of a certification by a professional engineer licensed by the State of New York stating that, if constructed in accordance with the final design plans, the Transmission Facility shall comply with the electromagnetic and magnetic field standards referenced in Condition 12, above;
- u. a notice of intent to exercise authority under the general stormwater State Pollutant Discharge Elimination System ("SPDES") permits for construction activities;

- v. plans for pre- and post-installation sediment and benthic community monitoring and mitigation described in Conditions 64, 65, and 66;
- w. a Compliance Plan that shall include:
 - i. The name(s) of the independent inspector(s) ("Independent Inspectors") and a statement of qualifications for each inspector demonstrating sufficient knowledge and experience in environmental matters to complete the inspections and audits;
 - ii. A certification confirming the independence of the inspector(s) from the Certificate Holder and certifying the authority of the inspector(s) to "stop work" in cases of non-compliance or imminent environmental or safety hazard;
 - iii. Provision for deployment of more than one inspector in the event that two or more major field operations are undertaken simultaneously, such that at least one inspector shall be assigned to each construction area, the same inspector shall not be assigned to both in-water and on-land activities simultaneously, and no inspector shall be assigned to more than two active construction areas at any one time;
 - iv. A proposed checklist of matters to inspect for compliance, including the specific items or locations to be inspected, the inspection to be employed (*e.g.*, visual, auditory, testing by instrument), and acceptability criteria to be applied by the inspector(s);
 - v. A procedure setting forth how the Certificate Holder shall respond to and correct problems found by the inspector(s);
 - vi. A schedule for monthly environmental audits during construction and submission of audit checklists, together with a written explanation of problem(s), signed by the Independent Inspectors and an authorized representative of the Certificate Holder, to DPS and NYSDEC; and

- vii. A schedule for submission of annual environmental audits during the first two years of operation of the Transmission Facility to DPS, NYSDEC, and appropriate local agencies.

37. The Certificate Holder shall also include in the EM&CP:

- a. An immediate post-installation inspection plan that shall include at a minimum: (i) the method for determining the actual cable location and actual depth below seabed of the cable upon completion of installation; (ii) standards to be used to determine if maintenance (i.e., additional burial and/or protection efforts) is warranted in locations, if any, where the cable burial depth is less than 15 feet below present bottom; and (iii) the method or methods and timing for applying such efforts;
- b. a maintenance plan that shall include, at a minimum, the standard to be used to determine, based upon inspection results, if and what relocation, reburial and/or added protection measures are required; and
- c. a plan for decommissioning the cable in the event that the cable is permanently de-energized;
- d. a plan for the use of concrete mattresses and dredging.

38. The Certificate Holder may conduct the maintenance work contemplated in Condition 37 at any time with twenty four (24) hour prior notice to DPS and NYSDEC, provided that it is conducted within the certified right-of-way, as granted by the New York State Office of General Services, and within the authorized construction window. For work that must be undertaken outside either the certified right-of-way or the authorized construction window, prior approval by the Commission shall be required, except in cases of an emergency.

Notices and Public Complaints

39. The Certificate Holder shall make available to the public a toll free or local phone number of an agent or employee where complaints may be received during the construction of the certified facilities. In addition, the phone number of the Secretary of the Commission and the phone

number of the Commission's Environmental Compliance Section shall also be provided in the event there are questions or concerns. A log shall be maintained that lists at least the date of any complaint, identity and contact information for the complaining party, the date of the Certificate Holder's response, and a description of the outcome. Phone logs shall be made available to DPS upon its request. During DPS's compliance inspections, the Certificate Holder shall report to DPS every complaint that is then unresolved.

40. No less than two weeks before commencing site preparation, the Certificate Holder shall give notice of the commencement of site preparation to local officials and emergency personnel. The Certificate Holder shall also provide such notice for dissemination to local media and for display in appropriate public places (such as general stores, post offices, community centers and conspicuous community bulletin boards). The notice shall contain: a map and a description of the Transmission Facility in the local area; the anticipated date for start of construction and the name, address and local or toll-free telephone number of an employee or agent of the Certificate Holder; a statement that the Transmission Facility is under the jurisdiction of the New York State Public Service Commission, which is responsible for enforcing compliance with environmental and construction conditions, and which may be contacted at an address and telephone number to be provided in the notice. The notice shall be written in language reasonably understandable to the average person. Upon distribution, a copy shall be submitted to the Secretary of the Commission and NYSDEC Staff.
41. The Certificate Holder shall provide construction contractors with complete copies of the Certificate, the approved EM&CP, the Section 401 Water Quality Certification, and any permit issued pursuant to Section 404 of the federal Clean Water Act and Section 10 of the federal Rivers & Harbors Act. To the extent that the listed documents are available before contracts for construction services are executed, such copies shall be provided to the contractors prior to execution of such contracts.
42. The Certificate Holder shall notify all construction contractors that the Commission may seek to recover penalties for violation of the Certificate, not only from the Certificate Holder, but also

from its construction contractors, and that construction contractors may also be liable for other fines, penalties, and environmental damage.

43. The Certificate Holder shall inform the Secretary, DPS, and NYSDEC at least five business days before commencing construction of the Transmission Facility.
44. The Certificate Holder shall provide DPS and NYSDEC with bi-weekly status reports summarizing the previous two weeks' construction and indicating construction activities and locations scheduled for the next four weeks.
45. Within ten days after the Transmission Facility is in service, the Certificate Holder shall notify the Commission of that fact.

Rights-of-Way, Construction, Maintenance and Restoration

46. The Certificate Holder shall confine construction and subsequent maintenance to the certified Transmission Cable Route and approved additional work areas, as detailed in the EM&CP.
47. The Certificate Holder shall prepare detailed soil handling and erosion control plans to be included in the EM&CP. The Certificate Holder shall install temporary erosion control devices as soon as practicable and appropriate as indicated in the EM&CP and any stormwater and erosion control plans as required under the Stormwater Pollution Prevention Plan.
48. Within ten days of the completion of final restoration, the Certificate Holder shall notify the Commission that all restoration has been completed in compliance with the EM&CP.

Installation

49. Construction within navigable waters shall not occur between December 1 of any calendar year and May 31 of the following calendar year, except that construction of the temporary cofferdam may be performed after March 31 and before November 15 of any calendar year. Once construction of the cofferdam is completed, work can proceed within it with no habitat or time-of-year restrictions. After prior consultation with DPS and NYSDEC Staff, however, the Certificate Holder may petition the Commission for a modification of this construction window provided

copies of the petition are served on all active parties to this proceeding that have requested (before the approval of the EM&CP) to be so served. The results of the consultation and recommendations of NYSDEC shall be reported in the petition.

50. The following in-water activities may be undertaken at any time: benthic, geotechnical and archeological sampling and testing; marine surveys; mobilization and demobilization of vessels and equipment used for cofferdam construction, dredging, and cable embedment; dredging within the cofferdam; post-construction surveys and sampling; locating and marking utility crossings and preparations to effect utility crossings; and, on prior notice to DPS and NYSDEC, emergency maintenance work.
51. The Certificate Holder shall use the jet plow embedment technique for the seabed installation of the proposed Transmission Facility. The Certificate Holder shall install the Submarine Transmission Cables at a burial depth consistent with the requirements of the Certificate Holder's U.S. Army Corps of Engineers permit, except where utility lines are crossed or where geologic or topographic features prevent burial at such depth. Utility crossings shall be executed consistent with standard industry practices as identified for each such crossing in the EM&CP.
52. In the event that the burial depth consistent with the requirements of the Certificate Holder's U.S. Army Corps of Engineers permit has not been substantially achieved in an area other than a utility crossing, due to geologic or topographic features, following the post-installation inspection provided for in Condition 37(a), the Certificate Holder shall report the actual depth, propose a plan for achieving an adequate burial depth or protection level given the location, submit it to NYSDEC and DPS for review, and commit to a reasonable schedule for implementation of the approved plan.
53. So long as the Certificate Holder complies with the requirements of Condition 52, failure to achieve the burial depth consistent with the requirements of the Certificate Holder's U.S. Army Corps of Engineers permit shall not be a basis for an order to cease installation of the remaining cable sections, an order not to energize, or an order to cease operation. No direction to not energize or to cease operation shall be given, except upon application for an order to the

Commission, which the Commission may grant or deny only after affording the Certificate Holder an opportunity to show cause why such order should not be granted.

54. The Certificate Holder shall employ horizontal directional drilling ("HDD") with associated cofferdam installation and dredging within the cofferdam to install the proposed submarine cable system from the proposed cable landfall location at the 25th Street Pier in Brooklyn, New York to avoid disturbance to nearshore sediments. The temporary cofferdam walls will extend above mean high water during dredging to contain suspended sediments associated with dredging activities and hence limit the dispersion of the suspended sediments to the interior footprint of the temporary cofferdam. All materials dredged in connection with the temporary cofferdam will be disposed of at an approved upland facility and will not be discharged in significant quantities back into the water column. After construction of the Transmission Facility and cofferdam removal are complete, the dredged area within the temporary cofferdam will be backfilled with imported clean backfill material, as needed, to restore the seabed to preconstruction contours. This work shall be completed in accordance with the EM&CP. No dredging is authorized by this Certificate except for dredging in connection with installation of the cofferdams and dredging within the cofferdam.

55. A closed environmental bucket shall be used for dredging silt or other fine-grained materials during cofferdam dredging. Drawings and specifications of the environmental bucket shall be provided to the NYSDEC Staff and DPS Staff 5 days prior to the anticipated start of dredging. Specifications shall demonstrate that appropriate design considerations are incorporated in equipment selected for deployment.

- a. A closed environmental bucket with sealing gaskets or an overlapping sealed design at the jaws, and seals or flaps positioned at locations of vent openings, shall be selected to minimize the loss of material during transport through the water column and into the barge. Seals or flaps designed or installed at the jaws and locations of vent openings must tightly cover these openings while the bucket is lifted through the water column and into the barge.

- b. If significant loss of water and visible sediments from the bucket is observed, the operator or independent inspector shall halt dredging operations and inspect the bucket for defects. Operations shall be suspended until all necessary repairs or replacements are made.
 - c. The material removed may not be side cast or returned to the water. The bucket shall be lowered to the level of the barge gunwales prior to release of the load. Bucket hoist speed shall be limited to approximately 2 feet per second. The bucket shall be lifted in a continuous motion through the water column and into the barge. There shall be no barge overflow.

The contractor shall demonstrate to the Independent Inspector's satisfaction that the bucket dredge operator has sufficient control over the bucket depth in the water and bucket closure so that the sediment resuspension from bucket contact with the bottom and bucket over-filling is minimized.
 - d. Only barges in good operating condition and appropriately designed to contain discharged sediments, shall be employed to contain the sediment and water placed in them. Deck barges shall not be employed, unless modified to allow no barge overflow. All sediments excavated during cofferdam construction and transition activities at the landfall location must be disposed of at a state-licensed upland disposal site. Dredged material shall not be sidecast, stockpiled on-site, or re-introduced into the water.
56. In-water activities shall be undertaken in a manner that minimizes the potential for interference with navigation.

Suspended Sediment and Water Quality Monitoring

57. During the jet plow trials and the installation, the Certificate Holder shall implement the *Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations*. ("Monitoring Plan") attached hereto as Attachment 1. The Certificate Holder shall operate the jet plow (subject to the approval of the field representatives of DPS Staff) in accordance with the

operating conditions determined through the jet plow trials described in Attachment 1 to minimize suspension of *in-situ* sediments.

58. TSS and water quality monitoring shall be conducted during jet plow embedment at transects specified according to the Monitoring Plan by collecting real-time data using Acoustic Doppler Current Profiler and Optical Backscatter Sensor instrumentation and by collecting water samples at various depths for laboratory analysis of: TSS; hardness; total PCBs; total mercury; and total and dissolved arsenic, cadmium, copper and lead according to the methods and method detection limits identified in the Monitoring Plan. Monitoring activities shall be conducted down-current of jetting operations and at a background/control station up-current of the jetting operations as follows: (a) TSS monitoring shall be performed at all transects identified in the Monitoring Plan during jet plow embedment of each of the three cables that will comprise the Submarine Transmission Cable; and (b) water quality sampling shall be performed at the up-current transect and at one designated down-current compliance transect during the jet plow embedment of the first cable installed only, due to the minimal distance (33 feet) between the cables. These TSS and water quality samples shall be collected at three depth intervals (near-surface, mid-depth, and near bottom). Additional monitoring of the successive cables may be required for TSS or water quality, if exceedances occurred during the first monitoring events.
59. Compliance-related conditions for TSS and water quality parameters are described in Conditions 60 and 61, respectively.
60. Total Suspended Sediment Control and Monitoring:
- a. The Certificate Holder shall work cooperatively with NYSDEC Staff and NYSDPS Staff to immediately review the results of the real-time data measurements during the jet-plow installation trials to evaluate whether the operating conditions result in TSS concentrations meeting the TSS threshold guidance criterion. If the jet plow trials demonstrate that the operating conditions result in TSS concentrations, measured 500 feet down-current of the jet plow, exceeding the TSS concentrations at the up-current background station by more than 200 mg/L, the Certificate Holder shall report such

conditions to the Independent Inspector and work with the representatives of NYSDPS, and NYSDEC staff to evaluate and implement reasonable and feasible modifications to the jet plow operating conditions to further reduce *in-situ* sediment resuspension associated with the jet plow installation procedure. NYSDPS and NYSDEC staffs' review of this information shall be completed and reported to the Certificate Holder within one business day of submission, so as not to unduly delay the commencement of installation of the submarine cable system.

- b. If, during jet plow installation of the cable, the near-bottom, mid-depth, or near-surface TSS concentrations measured 500 feet down-current of the operating jet plow exceed the TSS concentrations at the corresponding up-current background station by more than 200 mg/L, then NYSDPS Staff, NYSDEC Staff and the Independent Inspector shall be notified as soon as possible, and reasonable and feasible jet-plow operation mitigation measures shall be implemented after consultation with the field representatives of NYSDPS, NYSDEC and the Independent Inspector. These measures may include changing the rate of advancement of the jet plow, modifying hydraulic jetting pressures, or varying them, if possible, along the blade length, or implementing other reasonable operational controls that may reduce suspension of *in-situ* sediments. These mitigation measures shall be implemented to reduce TSS concentration as much as possible, but not in a manner that would stop or unreasonably delay the progress of work to install the submarine cable system. Nothing in this section is intended to require that hydraulic jetting pressures be reduced to levels which would not allow burial to the depths specified herein through a single installation pass.

61. Water Quality Limits and Monitoring:

- a. During the jet plow installation of the cable, the concentrations of the chemical constituents listed in the table below measured in the samples collected 500 feet down-current of the jet plow shall not exceed the greater of: (A) the levels set forth in the table below or (B) 1.3 times the highest ambient background level measured during the

same sampling day at the up-current background station at the same depth as the down-current sample.

Constituent	Standard or Guidance Value (ug/L)
Dissolved arsenic	36
Dissolved cadmium	7.7
Dissolved copper	7.9
Dissolved Lead	204
Total Mercury	0.05
PCBs per aroclor	0.2

- b. All water quality laboratory analyses required in this Certificate must be conducted by a laboratory certified by the New York State Department of Health. If the compliance criteria described in Condition 62(a) are exceeded at any time during the installation, additional water quality sampling shall take place at the location of the exceedance for subsequent cable installation passes. If mercury contamination is detected in the field blanks, additional sampling shall be required using EPA method 1669.
62. Nothing in this Certificate and its appendices shall limit either (a) the authority of NYSDEC to monitor the environmental and health impacts resulting from the construction and operation of the project and to enforce applicable provisions of the Environmental Conservation Law (including those which provide for summary abatement authority) and applicable implementing regulations governing the environmental and health impacts resulting from such construction and operation, or (b) any defenses to such enforcement that the Certificate Holder may be able to assert under applicable law.
63. Within six months of the completion of installation, the Certificate Holder shall prepare and submit to the NYSDEC and NYSDPS a final report summarizing the results of the suspended sediment/water quality monitoring program. Within one year of the completion of installation, the Certificate Holder shall prepare and submit to the NYSDEC and the NYSDPS an analysis comparing the actual monitoring results obtained during installation with the previous SSFATE model predictions.

Post Installation Sediment and Benthic Monitoring and Mitigation Plan

64. a. A pre- and post-installation sediment monitoring plan shall be submitted in the EM&CP after consultation with NYSDEC Staff and DPS Staff. The results of that consultation shall be reported in the plan submission. The plan shall provide that surficial sediment samples (top two centimeters) will be collected and analyzed prior to and subsequent to the completion of jet plow installation of the cable system, and that post-installation sampling shall commence promptly after the completion of the jet plow installation process. Specific methods and equipment shall be described to ensure the top two centimeters of ambient sediment are adequately collected, retained and sequestered for analysis. Samples shall be collected and analyzed for arsenic, cadmium, copper, lead, mercury, total PCBs using a congener-specific method, as outlined in the USACE/EPA Regional Testing Manual for Dredged Materials, and total polycyclic aromatic hydrocarbons ("PAH"). Surficial sediment samples shall be collected at stations located approximately 50 and 100 meters up-current and down-current from the planned route, such locations to be determined after consultation with NYSDEC Staff and DPS Staff. At least five locations spaced evenly along the route shall be identified from which the sampling stations shall be established (total of 20 samples).
- b. The Certificate Holder shall submit to the NYSDEC and DPS Staffs, within six months from the date of completion of the installation, a report which provides the analytical results, and compares them to pre-installation chemical concentrations in surficial sediments located along the approved route.
65. a. A pre- and post-installation benthic community monitoring plan shall be submitted in the EM&CP after consultation with NYSDEC Staff and DPS Staff. The results of that consultation shall be reported in the plan submission. The plan shall provide for periodic benthic monitoring at locations to be determined after consultation with NYSDEC Staff and DPS Staff, within an area extending approximately one hundred feet (100') on either side of the jet plowed trench for up to 18 months after completion of jet plow installation. The plan shall

- provide for one pre-installation benthic monitoring and at least one post-installation monitoring during the same season.
- b. The results of each periodic post-installation benthic community monitoring event shall be submitted to NYSDEC and NYSDPS Staffs within four months of the completion of the monitoring event.
66. A mitigation plan shall be submitted in the EM&CP after consultation with NYSDEC Staff and DPS Staff to accommodate and address the impacts to benthic habitat. The results of that consultation shall be reported in the plan submission. Since remediation of the impacted habitat and benthic community is impracticable, the mitigation plan shall provide criteria developed after consultation with DPS and NYSDEC Staff for determining when mitigation is necessary, and a method and schedule for implementation of mitigation measures.

Environmental Supervision

67. The authority granted in the Certificate and any subsequent order in this proceeding is subject to the following conditions necessary to ensure compliance with such order:
- a. The Certificate Holder shall regard DPS representatives (certified pursuant to Public Service Law Section 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or threaten to violate the terms of the Certificate or any other order in this proceeding, such DPS representatives may issue a stop-work order for that location or activity.
- b. A stop-work order shall expire in 24 hours unless confirmed by a single Commissioner. If a stop-work order is confirmed, the Certificate Holder may seek reconsideration from the confirming Commissioner or the whole Commission. If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or the Commission, the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.

- c. Stop-work authority shall be exercised sparingly and with due regard to the potential economic costs involved and possible impact on construction activities. Before exercising such authority, DPS field representatives may consult with the Independent Inspector, or may initiate action based upon the Independent Inspector's oral report, and shall attempt (wherever practicable) to direct preventive or remedial action through the Certificate Holder's representatives possessing comparable authority. In the event that DPS field representatives issue a stop-work order, neither the Certificate Holder nor the contractor shall be prevented from undertaking any safety-related activities that they deem necessary and appropriate under the circumstances.
 - d. In the event of any emergency involving specific construction or maintenance activities that violate or threaten to violate the terms of the Certificate or any other order in this proceeding, DPS field representatives may direct the Certificate Holder to install appropriate mitigative measures or devices.
68. The Independent Inspector and appropriate inspection personnel of the Certificate Holder shall be on site at the start-up of each field operation and at all times during environmentally sensitive phases of construction, including construction in waterbodies and waterfront areas. The Independent Inspector and appropriate inspection personnel of the Certificate Holder shall be equipped with sufficient documentation, and transportation and communication equipment to effectively monitor contractor compliance with the provisions of this Certificate, subsequent Orders in this proceeding, applicable sections of the Public Service Law, and the Commission-approved EM&CP.
69. The Certificate Holder shall organize and conduct site compliance audit inspections for DPS as needed but not less frequently than once a month during the site preparation, cofferdam construction and HDD drilling and cable pulling, cable-laying, upland excavation, construction, and restoration phases of the project. The inspection shall include a review of the status of all certification conditions, requirements, and commitments, as well as a field review of the project, if necessary. The inspection shall also include:

- a. reviews of all complaints received, and their proposed or actual resolutions;
- b. reviews of any significant comments, concerns or suggestions made by the public, local governments, or other agencies;
- c. reviews of the status of the project in relation to the overall schedule established prior to the commencement of construction by the EM&CP and any applicable Order of the Commission; and
- d. any other items the Certificate Holder or DPS considers appropriate.

The Certificate Holder shall circulate a written record of the results of the inspection to involved agencies.

Cultural Resources

70. Should archeological materials be encountered during construction, the Certificate Holder shall stabilize the area and cease construction activities in the immediate vicinity of the find and protect the same from further damage. Within twenty-four hours of such discovery, the Certificate Holder shall notify DPS and the New York State Office of Parks, Recreation, and Historic Preservation ("OPRHP") to determine the best course of action. No construction activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated and the need for, and the scope of, impact mitigation have been determined.
71. Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the immediate vicinity of the find shall be immediately halted and the remains shall be protected from further damage. Within twenty-four hours of any such discovery, the Certificate Holder shall notify DPS and OPRHP. All archaeological/burial encounters and their handling shall be reported in the status reports required by Condition 44, above.

Transmission System Reliability

72. The Certificate Holder is authorized to construct and agrees to design, engineer, and construct the interconnection facilities in support of the Transmission Facility as provided in the System Reliability Impact Study ("SRIS") approved by the New York Independent System Operator ("NYISO"), the Transmission Planning and Advisory Subcommittee ("TPAS"), the NYISO Operating Committee, and the NYISO Class Year 2009 Annual Transmission Reliability Assessment Study ("ATRAS"), and in accordance with the applicable and published planning and design standards and best engineering practices of NYISO, Consolidated Edison Company of New York, Inc. ("Con Edison"), the New York State Reliability Council ("NYSRC"), Northeast Power Coordinating Council ("NPCC"), North American Electric Reliability Council ("NERC"), and North American Electric Reliability Organization ("NAERO"), and successor organizations depending upon where the facilities are to be built and depending on which standards and practices are applicable. Specific requirements shall be those required by the NYISO Operating Committee and TPAS in the approved SRIS and by any interconnection or facilities modification agreements made with Con Edison and/or NYISO.
73. The Certificate Holder shall work with Con Edison, and any successor Transmission Owner (as defined in the NYISO agreement), to ensure that, with the addition of the Transmission Facility (as defined in the Interconnection Agreement among NYISO, the Certificate Holder and Con Edison), the system shall have power system relay protection and appropriate communication capabilities to ensure that operation of the electric transmission system is adequate under NPCC Bulk Power System Protection Criteria, and meets the protection requirements at all times of the NERC, NPCC, NYISO, and Con Edison, and any successor Transmission Owner (as defined in the NYISO agreement). The Certificate Holder shall ensure compliance with applicable NPCC criteria and shall be responsible for the costs to verify that the relay protection system is in compliance with applicable NPCC, NYISO, NYISO, and Con Edison criteria.
74. The following requirements apply:

- a. The Certificate Holder shall be responsible for its Transmission Facility's share of the cost of System Upgrade Facilities as determined by NYISO in accordance with its Federal Energy Regulatory Commission-approved tariffs, rules, and procedures.
 - b. The Certificate Holder shall be responsible for the cost of interconnection facilities as they are defined in Attachment S of the NYISO's Open Access Transmission Tariff and to the extent set forth in the Interconnection Agreement among the Certificate Holder, NYISO, and Con Edison.
 - c. Payments from the Certificate Holder to Con Edison of the amounts contemplated in this Certificate Condition shall be made in accordance with the terms of the Interconnection Agreement among the Certificate Holder, NYISO, and Con Edison.
75. The Certificate Holder shall operate the Transmission Facility in accordance with the approved tariffs and applicable rules and protocols of Con Edison, NYISO, NYSRC, NPCC, NERC, and NAERO, and successor organizations. The Certificate Holder shall obey operational orders issued by NYISO or its agent or successor. The Certificate holder may seek subsequent review of any specific operational orders at NYISO, the Commission, the Federal Energy Regulatory Commission, or in any other appropriate forum.
76. The Certificate Holder shall obey applicable dispatch instructions issued by NYISO, its agent, or its successor, in order to maintain the reliability of the transmission system. In the event that the NYISO System Operator encounters communication difficulties, the Certificate Holder shall obey dispatch instructions issued by the Con Edison Energy Control Center, or its successors, in order to maintain the reliability of the transmission system.
77. The Certificate Holder shall be in full compliance with the applicable reliability criteria of Con Edison, NYISO, NPCC, NYSRC, NERC, NAERO and successors. If it fails to meet the reliability criteria at any time, the Certificate Holder shall notify NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the Commission and Con Edison with a copy of the NYISO notice.

78. The Certificate Holder shall file a copy of the following documents with the Commission: all facilities agreements with Con Edison, and successor Transmission Owners (as defined in the NYISO agreement); the SRIS approved by the NYISO Operating Committee; any documents produced as a result of the updating of requirements by the NYSRC; the Relay Coordination Study (which shall be filed not later than six months prior to the projected date for commercial operation of the Transmission Facility, subject to coordination with Con Edison); a copy of the interconnection agreement and all updates thereto throughout the life of the electric plant; and a copy of the facilities design studies, including test and design data, for the New York and New Jersey portion of the Transmission Facility, including all updates throughout the life of the facility. If any equipment or control systems with different characteristics will be installed, the Certificate Holder shall provide that information to the Commission before any changes are made throughout the life of the plant.
79. In the event that an equipment failure of the certified facilities causes a significant reduction in the capability of the certificated facilities to deliver power, the Certificate Holder shall promptly provide to DPS and Con Edison copies of all notices, filings, and other substantive written communications with NYISO as to such reduction, any plans for making repairs to remedy the reduction, and the schedule for any such repairs. The Certificate Holder shall report monthly to DPS on the progress of any repairs.
80. If the Certificate Holder participates in the NYISO's Black Start program, it shall demonstrate annually that the unit can be black started. The Certificate Holder shall schedule with the NYISO and Con Edison the black start test and demonstrate black start procedures. If the black start test fails, the Certificate Holder shall produce a report describing the test and what actions or changes are being made to the black start procedures. A copy of such report shall be submitted to Con Edison, NYISO and the Commission. The Certificate Holder will provide the opportunity for Staff of the Department of Public Service to observe the black start testing. The Certificate Holder shall effectuate a successful black start annually to qualify for the Black Start program.

81. The Certificate Holder shall work with Con Edison system planning and system protection engineers to discuss the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Project to Con Edison's transmission system. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities. The technical considerations of interconnecting the electric plant to Con Edison's transmission facility shall be documented by the Certificate Holder and provided to Staff of the Bulk Electric Systems Section of the Department of Public Service and Con Edison prior to the installation of transmission equipment. Updates to the technical information shall be furnished as available throughout the life of the plant.
82. The Certificate Holder shall work with Con Edison engineers and safety personnel on testing and energizing equipment in the authorized substation. A testing protocol shall be developed and provided to Con Edison for review. A copy shall be provided to Staff of the Bulk Electric Systems Section of the Department of Public Service following Con Edison's review. The Certificate Holder shall make a good faith effort to notify Staff of the Department of Public Service (Staff) of meetings related to the electrical interconnection of the Project to Con Edison's transmission system and provide the opportunity for Staff to attend those meetings. The Certificate Holder shall provide a copy of the testing design protocol to Staff of the Bulk Electric Systems Section of the Department of Public Service.
83. The Certificate Holder shall call and report to the Staff of the Bulk Electric Systems Section of the Department of Public Service within six hours of any transmission related incident that affects the operation of the electric plant. The Certificate Holder shall submit a report on any such incident within seven days to the Bulk Electric Systems Staff and Con Edison. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. The Certificate Holder shall work cooperatively with Con Edison, NYISO and the NPCC to prevent any future occurrences.

84. The Certificate Holder shall make modifications to its Interconnection Facility, if it is found by the NYISO or Con Edison to cause reliability problems to the New York State Transmission System. If Con Edison or the NYISO bring concerns to the New York Public Service Commission, the Certificate Holder shall be obligated to address those concerns.
85. Within 60 days prior to commencement of commercial operation, the Certificate Holder shall file with the Secretary to the Public Service Commission, Operation and Maintenance Plan(s) for the electric plant.
86. The Certificate Holder shall file, within 60 days prior to commencement of commercial operation, a report with the Secretary to the Public Service Commission regarding implementation of any Special Protection System that is designed to mitigate possible overloads from certain transmission outages, as well as copies of all studies that support the design of such system. In addition, the Certificate Holder shall provide all documentation for the design of special protection system relays, with a complete description of all components and logic diagrams. Prior to commencement of operations, the Certificate Holder shall demonstrate through appropriate plans and procedural requirements that the relevant components of the Special Protection System will provide effective protection.
87. In the event the facility trips offline, the Certificate Holder shall notify Staff, within one hour of the incident. Following the incident, the Certificate Holder shall notify Staff and Con Edison of the cause of the trip, and what actions the Certificate Holder is taking to rectify the cause.
88. The Certificate Holder shall provide the Bulk Electric System Section of the Department of Public Service with a copy of its emergency procedures and contacts, and an updated copy shall be provided upon any modifications thereto.

Construction Progress Reports

89. The Certificate Holder shall commence construction within 18 months following the date of issuance of the Certificate or demonstrate to the Commission that there was reasonable cause for the delay and that there have not been any changes in circumstances that would require changes

in the terms and conditions of the Certificate or the approved EM&CP (or EM&CP's). Reasonable cause for the delay may include delays in (a) the Commission's approval of the EM&CP, including all phases of a multi-phase EM&CP; (b) the issuance by the U.S. Army Corps of Engineers of a Section 10/404 Permit to BEC for the Project; or (c) the grant by the New York State Office of General Services of a Construction Permit for the Submarine Transmission Cable, for circumstances beyond the reasonable control of the Certificate Holder.

90. After commencement of construction of the certificated Transmission Facilities, the Certificate Holder shall provide the DPS Staff and Con Edison with a monthly report on the progress of construction and an update of the construction schedule (these reports may be coordinated and consolidated with the reports required under Condition 44, above). In the event the Commission determines that construction is not proceeding at a pace that is consistent with Good Utility Practice and that a modification, revocation, or suspension of the Certificate may, therefore, be warranted, the Commission may issue a show cause order requiring the Certificate Holder to explain why construction is behind schedule and to describe such measures as are being taken to get back on schedule. The Order to Show Cause will set forth the alleged facts that appear to warrant the intended action. The Certificate Holder shall have thirty days after the issuance of such Order to respond and other parties may also file comments within such period. Thereafter, if the Commission is still considering action with respect to the Certificate, an evidentiary hearing will be held prior to issuance of any final order of the Commission to amend the certificate if required by Public Service Law Section 123(2), or to revoke or suspend the Certificate. It shall be a defense in any proceeding initiated pursuant to this condition if the delay of concern to the Commission (a) arises in material part from actions or circumstances beyond the reasonable control of the Certificate Holder (including the actions of third parties), (b) is not in material part caused by the fault of the Certificate Holder, or (c) is not inconsistent with a schedule that constitutes Good Utility Practice.

For purposes of this condition, Good Utility Practice shall mean any of the applicable acts, practices or methods from time to time (i) required by the NYSRC, NPCC, NERC or the NYISO or

any successor thereto, or any other organization with similar duties, including any local, state, regional, national or international reliability organization, or required by any rules issued pursuant to the authority of any such organization, in each case, with jurisdiction or authority in respect of Con Edison or Con Edison's transmission facilities or the Certificate Holder or the Transmission Facility and whether or not the party whose conduct is at issue is a member thereof, or by any other person acting pursuant to the authority of any of the foregoing entities or organizations or (ii) engaged in or approved by a significant portion of the electric generation and transmission industry in the United States during the relevant time period with respect to similar facilities if in any case there are no acts, practices or methods required by clause (i) applicable at such time.

91. The Certificate Holder shall file with the Commission, 18 months after the commencement of construction of the certified Transmission Facility, a detailed progress report. Should that report indicate that construction will not be completed within six months, the Certificate Holder shall include in the report an explanation of the circumstances contributing to the delay and a demonstration showing why construction should be permitted to proceed. In these circumstances, an order to show cause will not be issued by the Commission, but a hearing will be held before the Commission takes any action to amend the Certificate if required by Public Service Law Section 123(2), or to revoke or suspend the Certificate.

Dated: October 5, 2009

Attachment 1

Suspended Sediment/Water Quality Monitoring Plan for Jet Plow Embedment Operations

[See below]

**BAYONNE ENERGY CENTER PROJECT
SUSPENDED SEDIMENT/WATER QUALITY MONITORING PLAN
FOR JET PLOW EMBEDMENT OPERATIONS
Upper New York Bay and Gowanus Bay**

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ESS Project No. P273-005.03

September 9, 2009

**BAYONNE ENERGY CENTER PROJECT
SUSPENDED SEDIMENT/WATER QUALITY MONITORING PLAN
FOR JET PLOW EMBEDMENT OPERATIONS**

September 9, 2009

1.0 INTRODUCTION

This document presents the suspended sediment and water quality monitoring plan for the Bayonne Energy Center (BEC) Project. This plan is to be implemented during pre-installation jet plow trial operations and during jet plow embedment in New York State waters of Upper New York Bay and Gowanus Bay. The suspended sediment disturbance created by jetting operations will be characterized along specified transects using a three tiered approach: 1) by collecting *in situ* vertical profiles of the water column using a Conductivity-Temperature-Depth (CTD) profiler and Optical Backscatter Sensor (OBS); 2) by documenting the 3-dimensional current velocity and suspended sediment cross section of the water column using a vessel-mounted Acoustic Doppler Current Profiler (ADCP); and 3) by collecting water samples at various depths for laboratory analysis of total suspended solids (TSS). In addition, water quality monitoring will be conducted during jet plow embedment at specified transects by collecting water samples at various depths for laboratory analysis of hardness, total PCBs, total mercury, and total and dissolved arsenic, cadmium, copper and lead. Monitoring activities will be conducted down-current of jetting operations and at a background/control station up-current of the jetting operations as follows:

- TSS monitoring will be performed during jet plow embedment of each of the three cables that will comprise the Submarine Transmission Cable.
- Water quality sampling will be performed during the jet plow embedment of the first cable; however, water sampling will be conducted on subsequent cables in areas where compliance thresholds, described in the Certificate Conditions, are exceeded.

2.0 GENERAL MONITORING PROCEDURES

The physical characteristics and extent of the dispersing plume of sediment placed in suspension by an operating jet plow and concurrent TSS will be assessed with a combination of calibrated acoustic and optical data as well as water samples collected from an onsite survey vessel during daylight hours. The acoustic instrumentation will consist of a high frequency ADCP. This system will provide measurements of acoustic backscatter intensity and current velocity at 1 to 2 meter vertical increments. The quantitative relationship between acoustic backscatter intensity and the concentration of TSS will be established during pre-installation trials and updated based on data collected during the actual cable installation, as described in Section 3.0 and 4.0. Water samples will be shipped to a New York State-certified laboratory and analyzed for TSS by vacuum filtration through dried and pre-weighed filters (0.47 μ pore size).

The OBS will be deployed with a CTD profiler. This instrumentation suite will provide a vertical profile of backscatter intensity along with water temperature and salinity at a selected location along each survey transect that corresponds to the highest observed acoustic backscatter intensity. The quantitative relationship between optical backscatter intensity and TSS will be established during the pre-installation trials, as described in Section 3.0. The water samples obtained during the monitoring of jet plow embedment will be used to refine the pre-installation calibration. Comparisons between the optical and acoustic backscatter intensity measurements will provide a continuing check on system stability and calibration throughout the monitoring period.

The combination of these techniques is considered a relatively comprehensive, accurate, and cost effective means to define background TSS conditions based on project design and should serve to adequately define the character and extent (both space and time) of suspended sediment distribution associated with project jet plow embedment activities. The proposed methodology will allow real-time monitoring of project-related suspended sediment characteristics. The collection of water samples for laboratory measurement of TSS concentrations will provide an additional data correlation needed for calibration and will provide validation of the real-time monitoring results.

Water quality sampling will also be conducted to monitor the relative aqueous concentrations of constituents of concern specified in the Certificate Conditions related to jet-plow embedment activities. Based on review of the bulk sediment chemical analysis results provided in the Article VII application, the following water quality constituents will be sampled and analyzed: total PCBs, mercury, arsenic, cadmium, copper and lead.

3.0 PRE-INSTALLATION TRIAL SUSPENDED SEDIMENT MONITORING

A pre-installation trial operation of the jet plow equipment to be used for the submarine cable system will be conducted in the project area to simulate expected operating conditions. Possible adjustments to these conditions may be made at this time to assess TSS compliance criteria. This trial will be conducted in actual field conditions within representative sections or areas proximate to the proposed submarine cable route. The trial is expected to be conducted over a period of approximately two (2) days. It will include jetting to a depth of 15 feet below present bottom over a distance of approximately 1,000 feet to simulate jet plow embedment of the actual cable. Suspended sediment associated with the jetting trial activity will be monitored using the ADCP, CTD-OBS vertical profiles, and water samples as described in Section 4.0 below.

During the trials, the selected installation contractor will be able to test operational settings of the jet plow to minimize associated sediment resuspension while still achieving the design burial depth. In addition, the trial will provide an opportunity to refine suspended sediment monitoring procedures including the calibration of acoustic and optical backscatter intensity measurements and field testing of water sampling equipment. TSS and water quality sampling methods and means implemented in the jetting trials may be modified for the cable installation event based on the results of the pre-installation trial methods. Modifications may include adjustment of transect locations and spacing, number of water samples, methods for deploying equipment, and the procedures for calibrating real-time monitoring equipment to laboratory measurements of TSS. Any modification to the parameters specifically described in this monitoring plan will be subject to NYSDEC and NYSDPS review.

Water samples will be collected at multiple times and locations within a given tidal cycle during the trials to generate data necessary to develop a calibration curve for calibration of the OBS equipment as the Project proceeds to cable installation activities. The calibration process will utilize a statistical regression type analysis. Once calibration procedures have been completed, a working calibration curve will be generated and provided to NYSDEC Staff and NYSDPS Staff for their review prior to the commencement of cable installation. The calibration curve will be continuously updated based on data collected during the actual cable installation activities.

BEC will work cooperatively with NYSDEC Staff and NYSDPS Staff to immediately review the results of the real-time data measurements during the jet-plow installation trials to evaluate whether the preferred operating conditions result in TSS Concentrations meeting the TSS threshold guidance criterion. If the jet plow trials demonstrate that such criterion is satisfied, BEC will commence jet plow installation of the submarine cable system immediately after the completion of the jet plow installation trials with no further consultation with NYSDEC or NYSDPS staffs. If the jet plow trials demonstrate that the preferred operating conditions result in real-time TSS concentrations, measured 500 feet down-current of the jet plow, that exceed the TSS concentrations at the up-current background station by more than 200 mg/L,

BEC will report such conditions to the Independent Inspector and work with the representatives of NYSDPS and NYSDEC to evaluate and implement reasonable modifications to the jet plow operating conditions to minimize *in-situ* sediment resuspension associated with the jet plow installation procedure. Review of this information by NYSDPS and NYSDEC staffs shall not unreasonably delay the commencement of installation of the submarine cable system, which is expected to begin immediately after (within days) of completion of the jet plow trials.

4.0 JET PLOW EMBEDMENT SUSPENDED SEDIMENT MONITORING

Sediment resuspension during jet plow embedment of each of the three cables will be monitored along transects oriented perpendicular to the direction of current flow. The characteristics of the suspended sediment plume created by jet plow embedment will be monitored in real-time using an ADCP and a CTD-OBS vertical profiler. Water samples for laboratory analysis of TSS will also be collected from a designated location at each transect. The ADCP and CTD-OBS instruments will be calibrated to measure suspended sediment concentrations during jet plow embedment through quantitative relationships between the ADCP, CTD-OBS, and TSS established during Pre-Installation Trials and updated and refined throughout the jet plow embedment monitoring as described in Section 3.0. Monitoring of the suspended sediment plume will be conducted daily, on each of the three cable installations, once during flood and once during ebb tide conditions as described below.

- Real-time monitoring will consist of ADCP measurements and CTD-OBS profile measurements taken along at least three route-perpendicular transects. The first transect will be conducted approximately 500 feet up-current of the operating jet plow (or at a reasonably safe survey distance up-current of the jet plow) to measure ambient or background TSS conditions. Following a background measurement, the first down-current transect will be conducted as close as possible to the jet plow with the subsequent transects proceeding down-current for a sufficient distance and with a sufficient number of transects to characterize the limits of the jet plow induced plume. Possible transect distances may be 200 feet, 500 feet and 800 feet down-current of the jet plow installation device. The spacing and length of these transects will depend on resultant plume spatial characteristics and distances required to maintain a safe survey distance interval from the cable vessel at the time of survey.
- Along each transect, the ADCP will provide horizontal and vertical profiles of current velocities and acoustic backscatter intensity at the point of measurement. At the conclusion of each transect, a CTD-OBS vertical profiler system will be deployed and collected at the location where the highest acoustic backscatter intensity was observed by the ADCP. Water samples will also be collected at this location for laboratory measurement of TSS from three depths (near-surface, mid-depth, and near bottom). Water samples will be shipped to a New York State-certified laboratory for measurement of TSS using by-weight concentration methods.
- If, during jet plow installation of the cable, the near-bottom, mid-depth, or near-surface TSS concentrations measured 500 feet down-current of the operating jet plow exceed the TSS concentrations at the corresponding up-current background station by more than 200 mg/L, then NYSDPS Staff, NYSDEC Staff and the independent environmental monitor shall be notified. If necessary, reasonable and feasible jet-plow operation mitigation measures will be implemented after consultation with these representatives. These measures may include changing the rate of advancement of the jet plow, modifying hydraulic jetting pressures, or implementing other reasonable operational controls that may reduce suspension of *in-situ* sediments. These mitigation

measures will be implemented to reduce TSS concentration as much as possible, but not in a manner that would unreasonably delay the progress of work to install the submarine cable system. Nothing in this monitoring plan is intended to require that operational adjustments to the jet plow be made that would prevent burial of the cable to the depths specified in the permit conditions through a single installation pass.

5.0 JET PLOW EMBEDMENT WATER QUALITY MONITORING

Water quality sampling will be conducted to monitor the aqueous concentrations of identified constituents of concern specified in the Certificate Conditions. Water quality sampling will be conducted on the first cable installation only; however, water sampling will be conducted on subsequent cables in areas where compliance thresholds are exceeded. Because the three cables that will comprise the Submarine Transmission Cable will be separated by approximately 33 feet, significant variations in the concentrations of the constituents are not expected between cable installation locations.

- Water samples will be collected to monitor water quality at the up-current transect and 500 feet down-current from the operating jet plow. Water samples will be collected at the same location where the TSS water samples are taken (where the highest acoustic backscatter intensity was observed). The water quality samples will be collected at three depth intervals (near-surface, mid-depth, and near bottom). An elevated level of care should be exercised during the collection of the mercury samples to preclude contamination of either the samples and/or the field blanks. If mercury contamination is detected in the field blanks, additional sampling shall be required using EPA method 1669. Water quality samples will be shipped to a New York State-certified laboratory for analysis of hardness, PCBs, mercury, arsenic, cadmium, copper and lead according to the following methods and reporting limits:

Constituent	Method	Method Detection Limit
Hardness	Method 6020	460 ug/L
Total PCBs	Method 8082	0.020 ug/L (per Aroclor)
Total Mercury	Method 245.7 or Method 1631	0.005 ug/L
Total and dissolved Arsenic	Method 6020	1.0 ug/L
Total and dissolved Cadmium	Method 6020	0.2 ug/L
Total and dissolved Copper	Method 6020	0.2 ug/L
Total and dissolved Lead	Method 6020	0.2 ug/L

- Compliance thresholds for water quality parameters are described in the Certificate Conditions.

6.0 SAMPLING AND ANALYSIS SCHEDULE

The suspended sediment field monitoring and sampling described in this plan will be conducted once during flood and once during ebb tide every jetting day for each of the three cable installations. The water quality field sampling will be conducted once during flood and once during ebb tide every jetting day for the first cable only, however, water sampling will be conducted on subsequent cables in areas where compliance thresholds are exceeded. Field monitoring will be conducted during daylight hours only for safety reasons. Water samples collected for TSS analysis are anticipated to be transferred to a New York State certified laboratory within 24 to 48 hours after collection. TSS samples will not be batched since the results will be used during installation to update the calibration curve. Once samples

are received at the laboratory, the total turnaround time, including laboratory analysis, data entry, and data processing is expected to take four (4) to six (6) days. Water samples collected for selected metals, hardness, and PCB analysis will be transferred to a New York State certified laboratory at the end of each sampling day following collection or may be batched over a few days if holding times allow. Once samples are received by the laboratory, the total turnaround time is expected to be 14 days. Initial results will be forwarded to NYSDEC within two business (2) days of receipt from the laboratory in order to allow initial quality assurance checks to be performed prior to submittal to NYSDEC. Original laboratory data shall be submitted to DEC with accompanying discussion regarding quality assurance checks. Quality assurance review of the results will be completed three months after installation has been completed.

Failure to collect samples as specified in this Plan over the course of the installation will be considered a violation of certificate conditions.

7.0 REPORTING

Results of the pre-installation trial will be analyzed along with any findings or recommendations for procedural modifications at that time. The results will then be summarized in a brief letter report and provided to the NYSDEC and NYSDPS within two weeks of receiving the TSS water sample results from the laboratory.

Once cable installation activities begin, available real-time data results can be reported verbally on a daily basis to a designated contact at NYSDEC, if desired. After completion of cable installation activities, a final report will be prepared that will include a description of procedures followed during the monitoring program, field data results, laboratory data results, accompanying QA/QC data, and a summary description of the results. The final report will include the correlations between real-time optical and acoustical backscatter equipment and corresponding TSS results from water samples. The report will include a comparison of TSS and water quality results to project-required thresholds.

The final report summarizing the results of the suspended sediment/water quality monitoring program will be submitted to the NYSDEC and NYSDPS within six months of the completion of installation.

Within one year of project completion, an analysis comparing the actual TSS results obtained during installation to the previous SSFATE model TSS concentration predictions described in the report, "Results from Modeling of Sediment Dispersion During Installation of the Proposed Bayonne Energy Center Submarine Cable" (May 2009, Applied Science Associates, Inc.) will be submitted to the NYSDEC and NYSDPS. This analysis will include a table and a quantitative analysis (statistical analysis, if possible) comparing the actual and predicted results.

Appendix B

PROPOSED § 401 WATER QUALITY CERTIFICATION

NEW YORK STATE PUBLIC SERVICE COMMISSION
WATER QUALITY CERTIFICATION

Pursuant to: Section 401 of the Clean Water Act, 33 U.S.C. § 1341 (a)(1); Article VII of the New York State Public Service Law; 16 NYCRR Subpart 85-2; and 6 NYCRR Section 608.9.

Certification Issued to: Bayonne Energy Center, LLC
c/o Pure Energy Resources, LLC
25 Mall Road, Suite 100
Burlington, MA 01803

Facility Description

Bayonne Energy Center, LLC ("BEC") proposes to construct, operate, and maintain a 6.6-mile, 345 kilovolt alternating current (345 kV AC), 3 phase circuit, submarine electric transmission facility. The facility will run under the sea floor of Upper New York Bay and will connect BEC's electric generation facility in Bayonne, New Jersey to the Consolidated Edison Company of New York, Inc., Gowanus Substation in Brooklyn, New York. The details and justification for the Facility are contained in the administrative record before the Public Service Commission in Case 08-T-1245.

Location of Facility

The Facility will consist of a 6.6-mile, 345 kV AC, 3 phase circuit, submarine electric transmission cable and related equipment. All of the Facility will be buried except for a short portion of the upland transmission cable and associated electrical interconnection equipment within the existing Consolidated Edison Gowanus Substation. The proposed Facility route lies underneath the sea floor of the Upper New York Bay and underneath the 25th Street Pier in Brooklyn, New York. No streams or freshwater wetlands are crossed. The right-of-way will be maintained in accordance with the Environmental Management and Construction Plan ("EM&CP") for the proposed line, and the Certificate of Environmental Compatibility and Public Need (the "Certificate").

Certification

The New York State Public Service Commission certifies pursuant to § 401 of the Clean Water Act, 33 U.S.C. § 1341(a)(1), and Article VII of the New York State Public Service Law, 16 NYCRR Subpart 85-2, and 6 NYCRR Section 608.9, that if BEC submits an acceptable EM&CP and complies with the conditions stated below, construction of the Facility will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and will not violate New York State water quality standards and requirements. This certification is issued in conjunction with the Certificate issued to BEC in Case 08-T-1245, and any EM&CP as approved.

Water Quality:

During the jet plow installation of the cable, the concentrations of the chemical constituents listed below, as measured in the samples collected 500 feet down-current of the jet plow shall not exceed the greater of: (A) the levels set forth in the table below or (B) 1.3 times the highest ambient background

level measured during the same sampling day at the up-current background station at the same depth as the down-current sample.

Constituent	Standard or Guidance Value (ug/L)
Dissolved arsenic	36
Dissolved cadmium	7.7
Dissolved copper	7.9
Dissolved Lead	204
Total Mercury	0.05
PCBs per aroclor	0.2

All water quality laboratory analyses required in this Certification must be conducted by a laboratory certified by the New York State Department of Health. If the compliance criteria described above are exceeded at any time during the installation, additional water quality sampling shall take place at the location of the exceedance for subsequent cable installation passes.

Conditions

1. No in-water work shall commence until all pre-construction conditions relating to such work contained in the Certificate have been met to the satisfaction of the New York State Public Service Commission.
2. Construction and operation of the Facility shall at all times be in conformance with the application in Case 08-T-1245, to the degree not superseded by the Certificate, and all conditions of approval contained in the Certificate.
3. Construction and operation of the Facility shall at all times be in conformance with the terms and conditions of the Joint Proposal dated October 5, 2009, and filed in Case 08-T-1245, to the degree not superseded by the Certificate.
4. Construction and operation of the Facility shall at all times be in conformance with the EM&CP, and all conditions incorporated in any order approving the EM&CP, in Case 08-T-1245.
5. BEC shall provide a copy of this certification to the U.S. Army Corps of Engineers along with a copy of the application, Joint Proposal, Certificate, EM&CP, and order approving the EM&CP (and all subsequent EM&CPs and approval orders) in Case 08-T-1245 so that the U.S. Army Corps of Engineers will have a complete record of the conditions that apply hereto.
6. BEC shall provide to all construction contractors complete copies of the Article VII Certificate, the approved EM&CP, and this certification.

Certified by:

 Name:
 Office of Energy Efficiency and the Environment
 New York State Department of Public Service
 Three Empire State Plaza
 Albany, New York 12223